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 TABULAR DATA REPORT FOR APOLLO
 MODEL (FS-1) WIND TUNNEL TEST
 (SAL 199)

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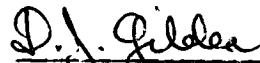
26 March 1962

4.5.5.1

Prepared by

Apollo Engineering
Aerodynamics Section

Approved by


 D. J. Glidea
 Manager
 Flight Technology

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SPACE and INFORMATION SYSTEMS DIVISION

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FOREWORD

The test described herein was conducted under NASA Apollo contract NAS 9-150.

This report was prepared by A. Gillies of the Wind Tunnel Test Group, Space And Information Systems Division of North American Aviation, Inc.

Edwin C. Allen
E. C. Allen-Supervisor
Wind Tunnel Test

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ABSTRACT

This report presents test results of a 0.02-scale Apollo force model (FS-1) in the NAA Supersonic Aerophysics Laboratory tunnel at Mach numbers from 1.575 to 3.27. A description of the model and model installation is given. Instrumentation and tunnel operating conditions are specified. Six-component force and moment data are presented in tabular form.

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I. INTRODUCTION

Apollo force model FS-1 was tested in the NAA Supersonic Aerophysics Laboratory (SAL) wind tunnel during the period 19 February 1962 to 6 March 1962.

The purpose of the test was to study the aerodynamic characteristics of the launch escape system utilizing various escape motor, jettison motor, and tower configurations. The static stability of the command module was investigated at three Mach numbers.

A total of 744 acceptable data points were taken at five Mach numbers ranging from 1.575 to 3.27 and Reynolds numbers from 1.16 to 0.539×10^6 .

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II. MODEL DESCRIPTION

General

The model tested was a 0.02-scale model of various launch escape system configurations and of the command module alone. Twenty combinations of the nine escape motors and four tower structures were tested.

Ten command modules were utilized. They are identical except for the angle between the module axis of symmetry and the centerline of the balance cavity. The different balance cavity angles were used to obtain an angle of attack range of -10 to +90 degrees for the launch escape system, and -10 to +190 degrees for the command module alone.

The model was designed and fabricated by NAA. Refer to Table 1 for a listing of parts used and pertinent drawing numbers.

Command Module

The command module configuration tested is shown in Fig. 1. The location of the reference center of gravity and tower attach points are shown.

Launch Escape System

The components that make up the launch escape system are shown in Figs. 2 and 3. The combinations of escape motors and tower structures tested are listed in Section V.

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TABLE 1

Model Nomenclature

<u>SYMBOL</u>	<u>DESCRIPTION</u>	<u>DRAWING NO.</u>	<u>PART NOS.</u>
C	Command Module	NAA 7121-01051	-2 thru -11
E	Escape Motor	"	-14, -15, & -17
E ₂	"	"	-15, & -16
E ₃	"	"	-14, -15, -17, & -22
E ₄	"	"	-14, -15, & -17 minus tanks
E ₅	"	"	-14, -15, -17, & -22 minus tanks
E ₆	"	"	-14, & -17 minus tanks
E ₇	"	"	-17, -20, & -29
E ₈	"	"	-17, -27, & -29
E ₉	"	"	-26
T	Tower Structure	"	-18
T ₂	"	"	-19
T ₇	"	CO 7121-019	-
T ₈	"	NAA 7121-01051	-27 & -28

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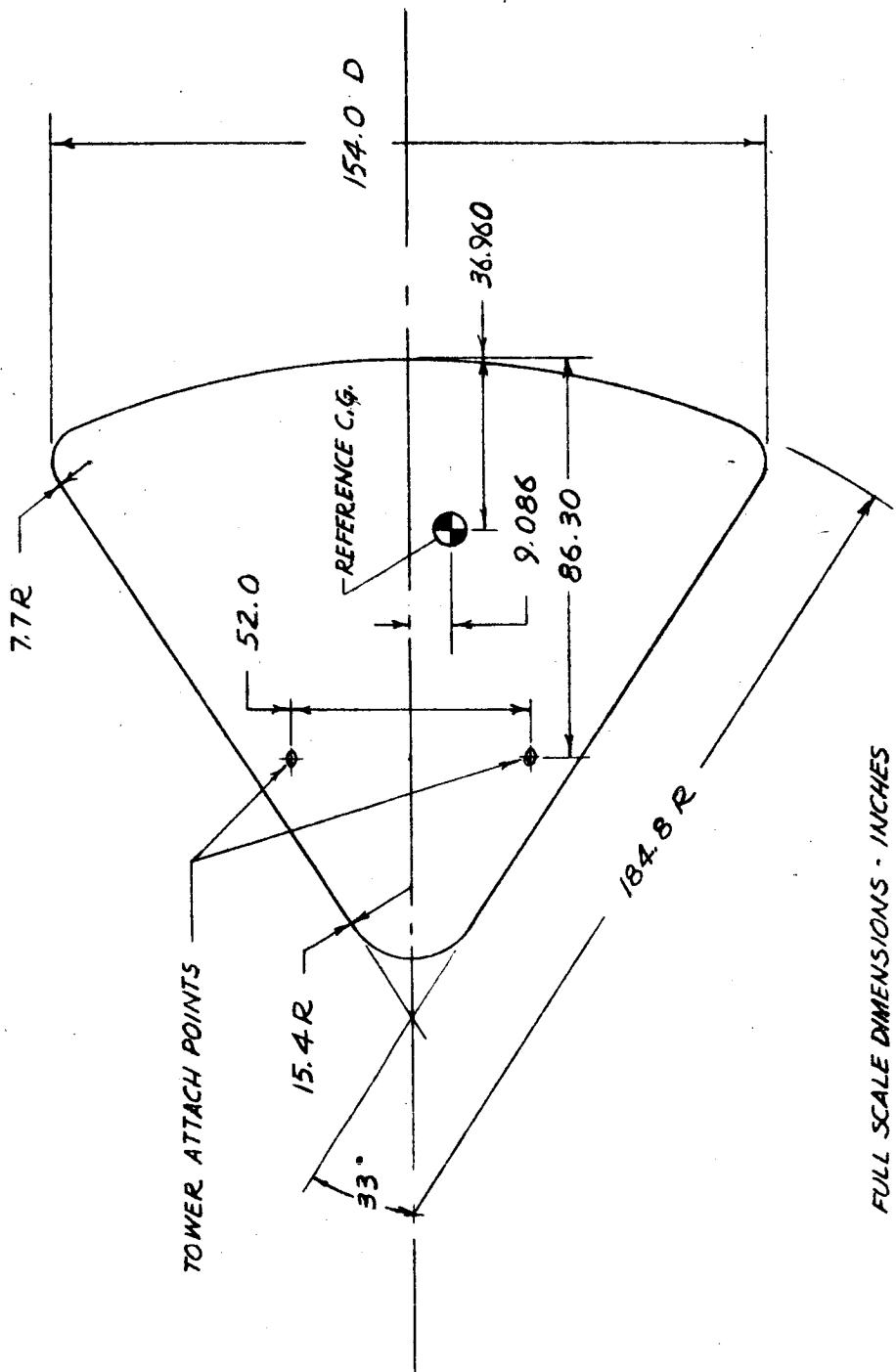
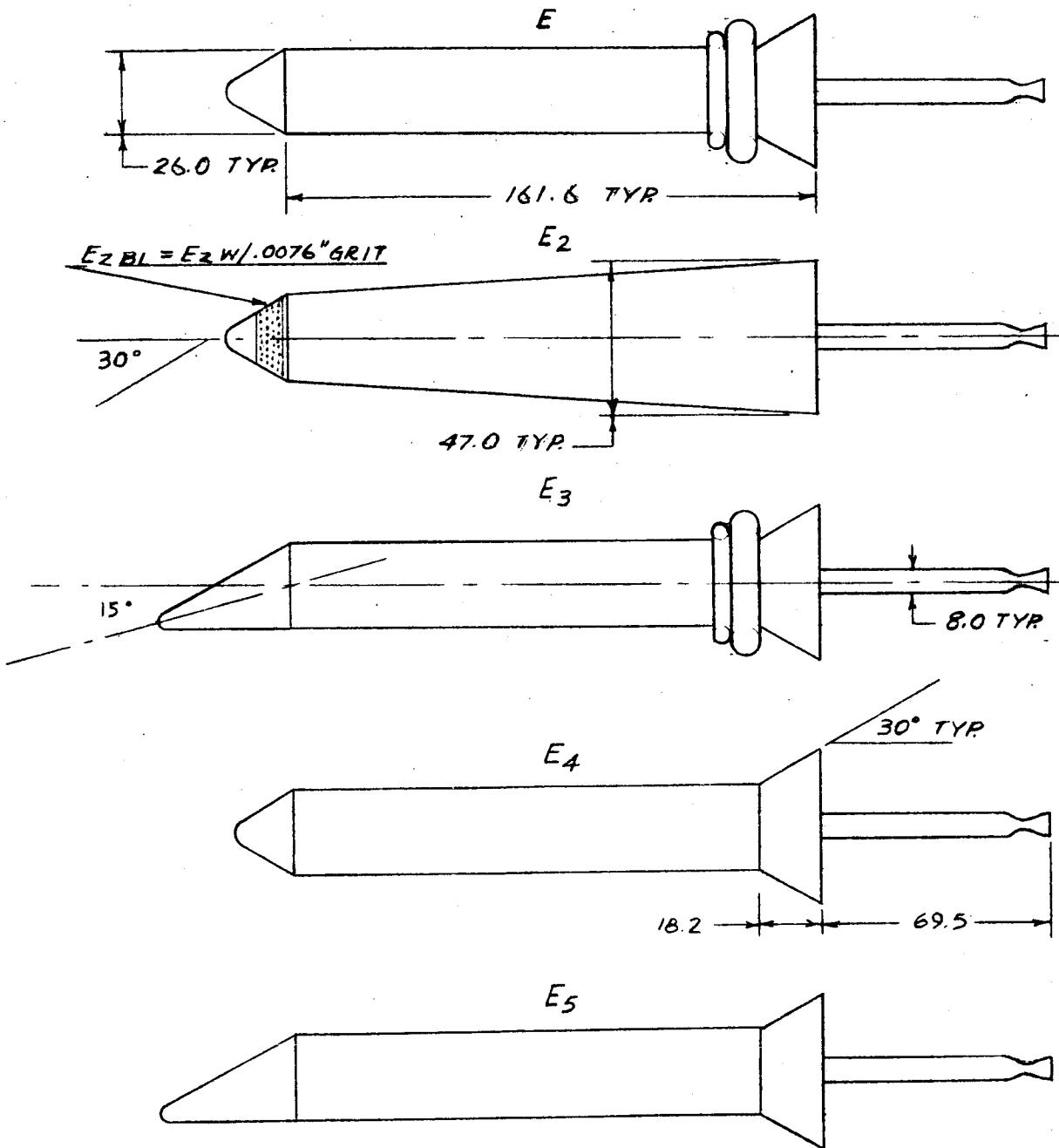


FIGURE 1 - COMMAND MODULE.

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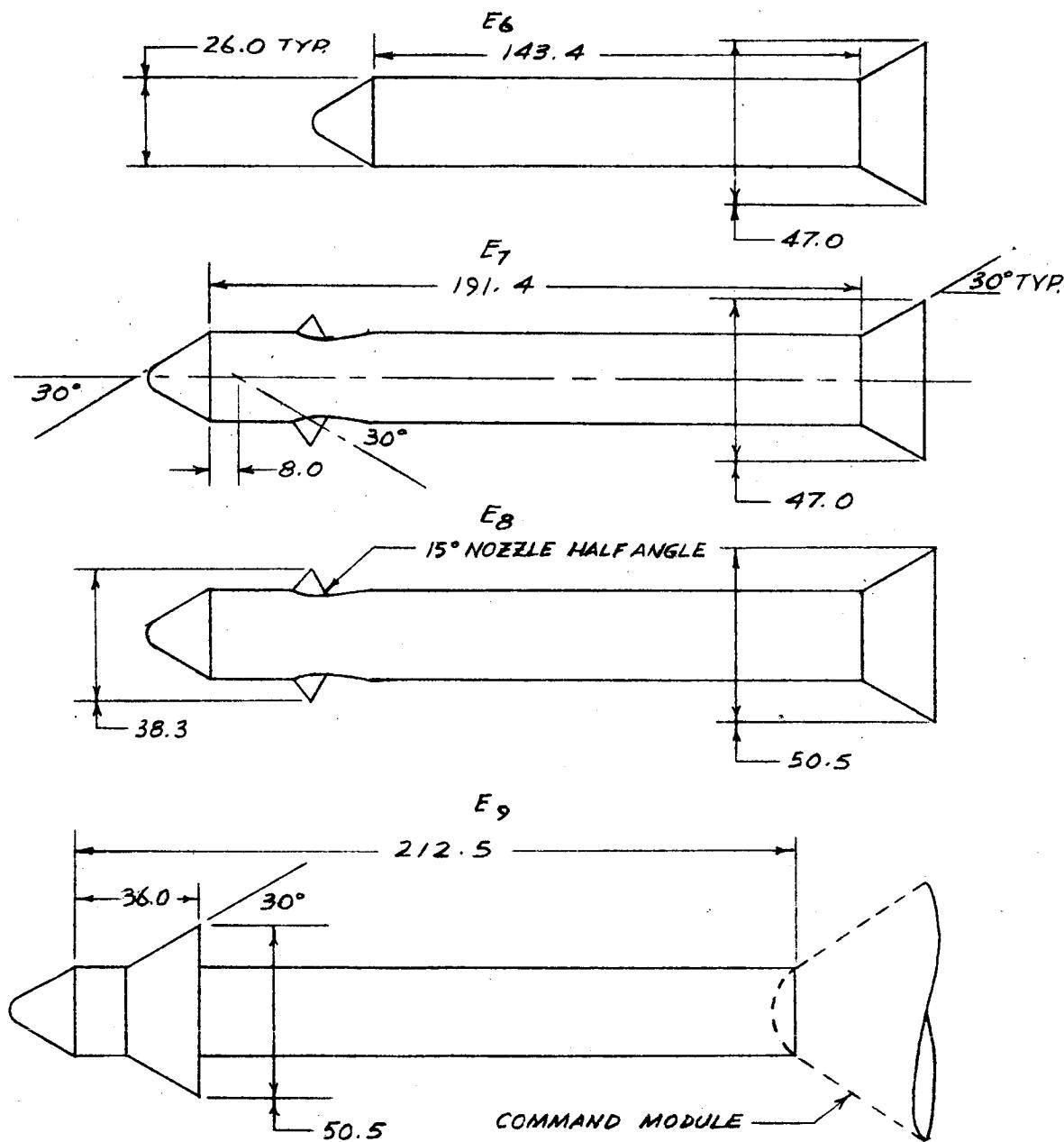
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FULL SCALE DIMENSIONS - INCHES
NOT TO ANY SCALE

FIGURE 2. - LAUNCH ESCAPE SYSTEM, ESCAPE MOTORS.

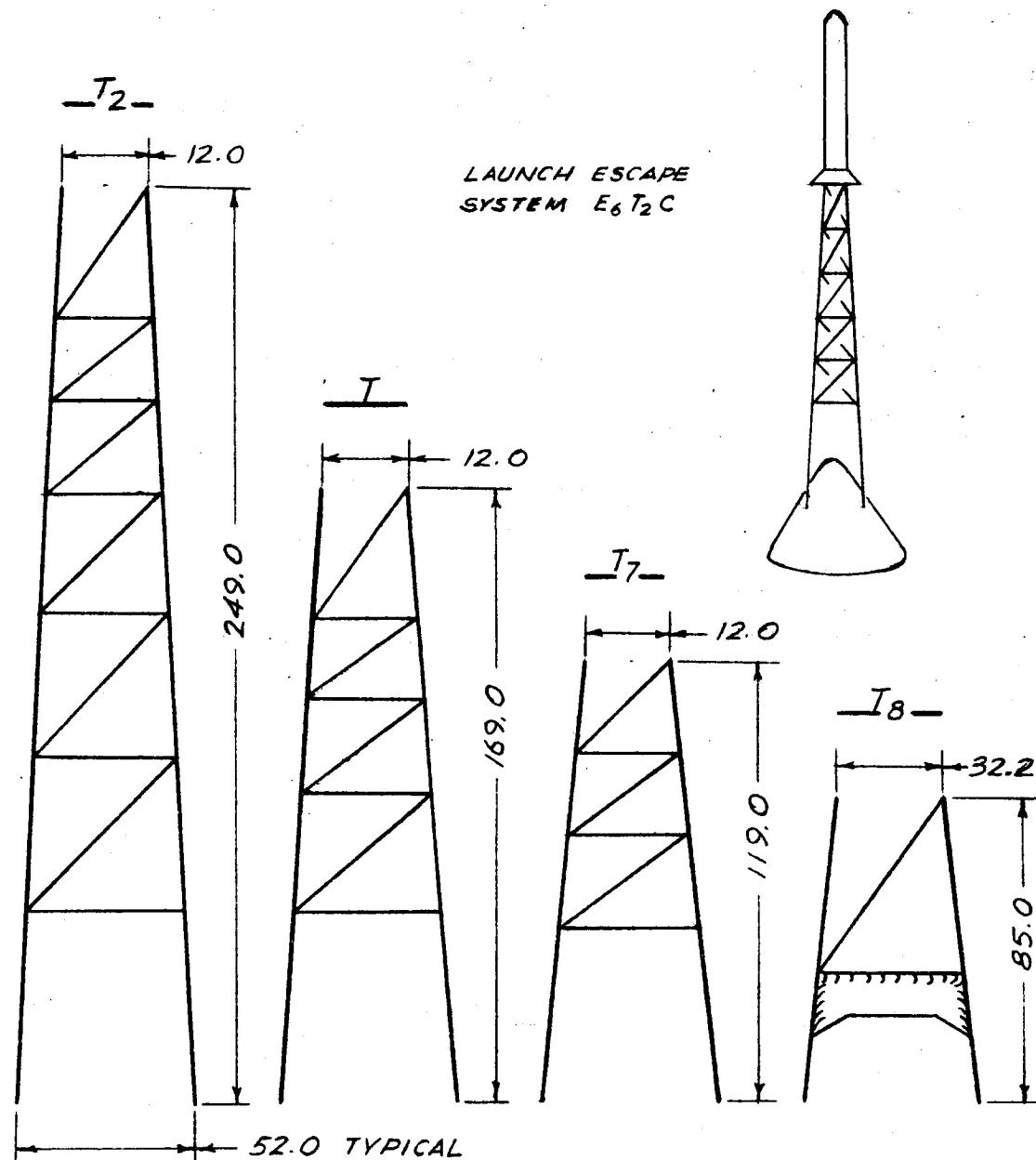
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TOP VIEWS



FULL SCALE DIMENSIONS - INCHES
NOT TO ANY SCALE

FIGURE 2a. - LAUNCH ESCAPE SYSTEM, ESCAPE MOTORS (cont.).

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FULL-SCALE DIMENSIONS - INCHES
NOT TO ANY SCALE

FIGURE 3. - LAUNCH ESCAPE SYSTEM, TOWER STRUCTURES.

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III. INSTRUMENTATION

Force Measurement

Six-component force and moment data were measured with the SAL H-675 balance, Ref. 2. The H-675 consists of a H-700B balance which measured pitching, yawing, and rolling moment, and a 3155 balance which measured chord force, pitching and yawing moment. The H-700B was located partially within the model and was shielded with a 7121-01051-24 sting shield. The 3155 was located in the sector assembly approximately 25 inches aft of the H-700B. A straight sting was used to support the model. A sketch of the model installation is shown in Fig. 4.

Pressure Measurement

Pressures were measured at the end of the wind shield closest to the model and within the balance chamber. No corrections to force and moment data were made for these pressures at the time of this report.

Flow Visualization

Schlieren photographs were taken at approximately 10 degree intervals for each configuration and Mach number.

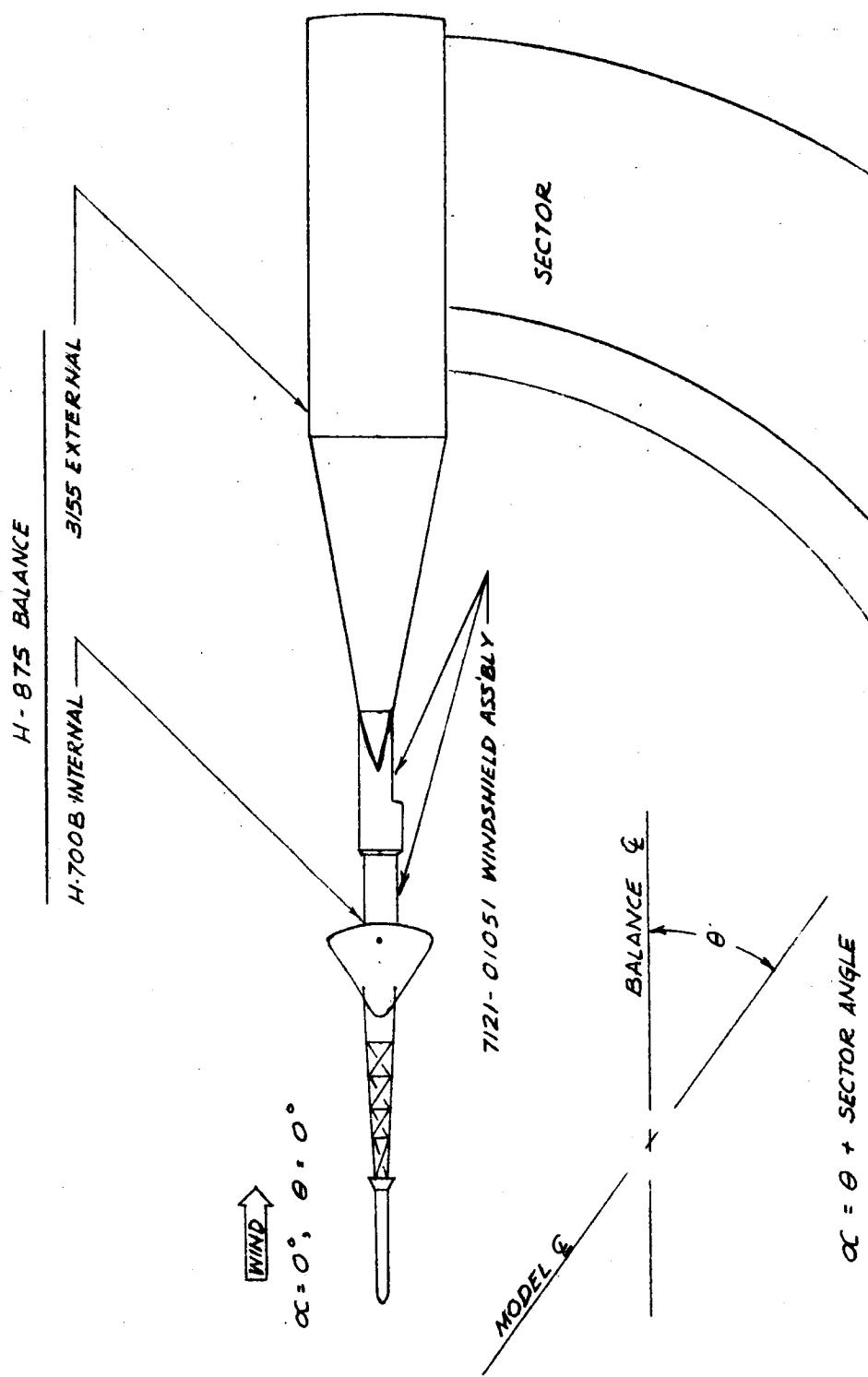
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FIGURE 4 - MODEL INSTALLATION.

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IV. OPERATING CONDITIONS

Model Attitudes

The angle of attack range for the launch escape system was from -10 to +90 degrees and from -10 to +190 degrees for the command module alone. In some cases these basic ranges varied.

Flow Conditions

The flow conditions indicated are for tunnel clear operation.

Mach No.	Reynolds No. x 10 ⁻⁶ based on command module diameter	Dynamic Pressure lb/ft ²
1.575	1.16	984
1.880	1.04	790
2.490	0.79	548
2.770	.68	430
3.270	.54	270

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V. TEST PROGRAM

SUMMARY OF COMPLETED RUNS
LAUNCH ESCAPE SYSTEM

CONFIGURATION	NO.	RUN NUMBER									
MACH NO.	=	1.575									
θ	=	0 20 40 60 80 0 20 0 20 0 20									
<i>169" TOWER</i>											
<i>E</i> <i>T</i> <i>C</i>	1	21	26			16	63	60	71	69	81
<i>E</i> <i>2</i> <i>T</i> <i>C</i>	3	22	24			15					
<i>E</i> <i>2B</i> <i>6</i> <i>T</i> <i>C</i>	21	103									
<i>E</i> <i>3</i> <i>T</i> <i>C</i>	5	31	37			62	61	72	70	80	79
<i>E</i> <i>4</i> <i>T</i> <i>C</i>	7	30	35								
<i>E</i> <i>5</i> <i>T</i> <i>C</i>	8	32	36								
<i>E</i> <i>7</i> <i>T</i> <i>C</i>	16	84									
<i>E</i> <i>8</i> <i>T</i> <i>C</i>	20	104									
<i>249" TOWER</i>											
<i>E</i> <i>T</i> <i>2</i> <i>C</i>	2	11→14	27								
<i>E</i> <i>2</i> <i>T</i> <i>2</i> <i>C</i>	4	17→20	9	7	5	3					
<i>E</i> <i>3</i> <i>T</i> <i>2</i> <i>C</i>	9	25	23								
<i>E</i> <i>4</i> <i>T</i> <i>2</i> <i>C</i>	10	33	28								
<i>E</i> <i>5</i> <i>T</i> <i>2</i> <i>C</i>	11	34	29								
<i>119" TOWER</i>											
<i>E</i> <i>T</i> <i>3</i> <i>C</i>	12	43	40			64	58	73	67	82	76
<i>E</i> <i>2</i> <i>T</i> <i>7</i> <i>C</i>	13	42	39								
<i>E</i> <i>3</i> <i>T</i> <i>7</i> <i>C</i>	14	44	41			65	59	74	68	75	77
<i>85" TOWER</i>											
<i>E</i> <i>6</i> <i>T</i> <i>8</i> <i>C</i>	19	102									
<i>E</i> <i>7</i> <i>T</i> <i>8</i> <i>C</i>	18	101									
<i>E</i> <i>8</i> <i>T</i> <i>8</i> <i>C</i>	17	100									
<i>NO TOWER</i>											
<i>E</i> <i>9</i> <i>C</i>	15	83									

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V. TEST PROGRAM

SUMMARY OF COMPLETED RUNS
COMMAND MODULE

CONFIGURATION	NO.	MACH	RUN NUMBER							
G =		0	20	40	60	80	100	120	140	160
C	6	1.575	85	86	87	88	89	10	8	6
		1.88							4	2
		2.49	105	107	109	111	113	114	112	110
		2.77								108
		3.27	99	98	97	96	90	91	92	93
									94	95



VI. TABULAR DATA

Data Reduction ConstantsReference area = 7.4506 in².

Reference length = 3.0800 in.

Reference center of gravity location:

Command module alone

0.7392 inches from the center of the heat shield, measured along the axis of symmetry.

0.1817 inches below the axis of symmetry

Launch escape system

2.1560 inches from the center of the heat shield, measured along the axis of symmetry

Located on the axis of symmetry

Index to Tabulated Data

A key to the tabulated data is shown in Fig. 5. The following nomenclature was used.

Symbol

C_L	Lift coefficient	= L/qS
C_N	Normal force coefficient	= N/qS
C_X	Axial force coefficient, stability axes,	= C_D , when $\Psi = 0$
C_A	Axial force coefficient, body axes,	= A/qS
C_D	Drag coefficient	= D/qS
C_m	Pitching moment coefficient	= m/qSd
C_n	Yawing moment coefficient	= n/qSd
C_l	Rolling moment coefficient	= l/qSd
L/D	Lift drag ration	= C_L/C_D



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VI. TABULAR DATA (Cont'd)

- X_{cp}/d Center of pressure, measured from the center of the heat shield along the axis of symmetry
 $= (\bar{x}/d) + (C_{m,c.g.}/C_N) - (C_A/C_N) (\bar{z}/d)$
- q Dynamic pressure, psi.
- S Reference area, in².
- d Reference length, in.
- \bar{x} Distance from the center of the heat shield to the reference center of gravity, measured along the axis of symmetry
- \bar{z} Distance from the axis of symmetry to the reference center of gravity in the x plane
- α Angle of attack, deg.
- ψ Angle of yaw, deg.
- C_{pb} Pressure coefficient at the end of the windshield
 $= (P_b - P_\infty / q)$

Subscripts

S Referenced to the stability axis system

B Referenced to the body axis system

Index to Tabulated Data

The test data is tabulated in the Appendix to this report. Figure 5 shows the location of the coefficients on the data sheets.

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EACH POINT CONSISTS OF TWO LINES
REFER TO SECTION ▽ FOR RUN IDENTIFICATION

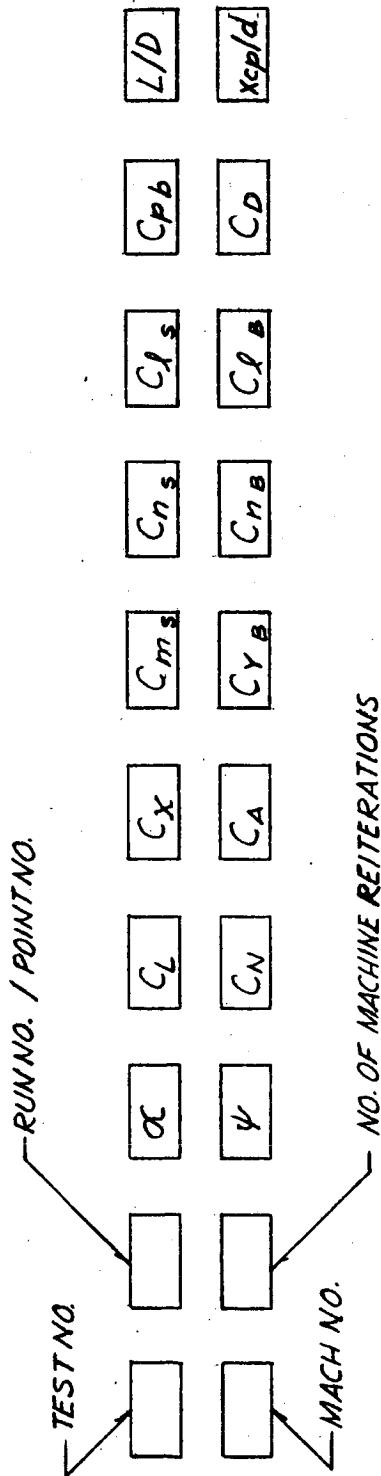


FIGURE 5. INDEX TO TABULATED DATA.

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VII. REFERENCES

1. Cohen, M. H., "Test and Model Information to Wind Tunnel Tests of an 0.02-Scale Force Model (FS-1) of the Apollo in the North American Aviation Supersonic Aerophysics Laboratory," North American Aviation Report NA-62-82, 25 January 1962.
2. Strain Gage Balance, NAA Drawing H-875, 31 January 1962.

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APPENDIX A

A-1

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SID 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN LOG THETA= 0, CONFIGURATION••(1) RUN NO. 1

MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B (L/D)	CD	(X CP/D)
1201	1.005	-0.001	.00821	.77383	-0.01175	.00577	.00089	-0.28233	.01061			
1575	2.000	-0.020	.00820	.77383	-0.01184	.00577	.00089	.77383	-.73289			

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

RUN NO. 2

TEST NO. RUN.LOG

RELT

MACH NO.

THETA=180, CONFIGURATION..(6)

TEST NO.	RUN.LOG	ALPHA C	CL	CX	CPM	CYM. STAB (DP/Q)B (L/D)	CRM. STAB (DP/Q)B (L/D)	CYM. BODY	(CY) BODY	(CA) BODY	CRM. BODY	CD	(X CP/D)	
1201	2.009	180.001	.01433	1.14264	-.08133	.01565	.00185	-.00186	-.00186	.01565	.00185	-.00186	.01254	
1575	2.000	.033	-.01368	-1.14264	.01103	-.01564	-.00186	1.14264	1.14264	-.01564	-.00186	1.14264	1.25774	
0	.010	175.007	.10815	1.13654	-.07131	.C1568	.00053	-.01575	-.01575	.01568	.00053	-.01575	.09516	
0	3.000	.033	-.00816	-1.14165	.01107	-.01557	-.00190	1.13654	1.13654	-.01557	-.00190	1.13654	.72567	
0	.011	179.999	.01333	1.13190	-.08143	.01493	.00186	.01941	.01941	.01493	.00186	.01941	.01177	
A-3	0	2.000	.031	-.01265	-1.13191	.01069	-.01492	-.00187	1.13190	1.13190	-.01492	-.00187	1.13190	1.39943
0	.012	175.011	.11019	1.12751	-.07062	.01709	.00067	.00116	.00116	.07062	.01709	.00067	.09772	
0	3.000	.037	-.01105	-1.13283	.01413	-.01697	-.00216	1.12751	1.12751	-.01697	-.00216	1.12751	.58361	
0	.014	170.007	.18879	1.08439	-.05886	.01199	-.00019	.03068	.03068	.05886	.01199	-.00019	.17410	
0	2.000	.024	.00286	-1.10070	.00747	-.01184	-.00191	1.08439	1.08439	.00286	-1.10070	-.01184	-.00191	
0	.016	170.004	.18577	1.07749	-.05914	.01189	-.00030	.02790	.02790	.05914	1.07749	-.05914	.02790	
0	2.000	.023	.00470	-1.09338	.00644	-.01176	-.00178	1.07749	1.07749	.00470	-1.09338	-.01176	-.00178	
0	.017	175.014	.11230	1.12396	-.07008	.01694	.00072	-.00068	-.00068	.07008	.01694	.00072	-.00068	
0	3.000	.037	-.01353	-1.12947	.01410	-.01681	-.00220	1.12396	1.12396	.01353	-1.12947	-.01681	-.00220	

SID 62-343

NAA SISD SUPersonic AERO LABORATORY TEST DATA PRINTOUT.. (USE EDPM PROGRAMS 2K176+199) JOB NO. (3509-14)

SAL NO. 199

RUN NO. 2

THETA=180, CONFIGURATION..(6)

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	DP/QIB (L/D)
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CD (X CP/D)
1201	2.019	180.000	.01413	1.13244	-.08175	.01493	.00190	.01874 .01248
1575	2.000	.031	-.01346	-1.13245	.01069	-.01493	-.00191	1.13244 1.35072
0	.020	184.992	-.08296	1.14803	-.09229	.01836	.00366	-.01778 -.07227
0	2.000	.042	-.01655	-1.15090	.01658	-.01861	-.00206	1.14803 1.71378

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A-4

SID 62-343

NAA SISD SUPERSONIC AEROLABORATORY TEST DATA PRINTOUT. USE EDPM PROGRAMS 2K176+199 JGS NG. (3509-14)

Call No. 100

THETA = 80 : CONFIGURATION :: (4)

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TEST NG.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	(DP/Q)B	(L/D)
MACH NG.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CD (X CP/D)

1201	3.024	91.427	-0.23493	1.32397	.73204	.00946	-.00362	-.27076	-.17744
1575	2.000	-.005	1.32935	.20228	-.00935	-.00385	-.00937	1.32397	1.25067
0	.026	81.144	-.23898	1.39045	.70699	.01222	-.00220	-.27410	-.17187
0	2.000	-.008	1.33696	.45055	-.01353	-.00029	-.01241	1.39045	1.22880
0	.027	81.138	-.23915	1.38659	.70432	.01236	-.00247	-.27331	-.17247
0	2.000	-.009	1.33308	.45026	-.01433	-.00053	-.01262	1.38659	1.22834
0	.029	70.879	-.17179	1.43841	.66568	-.00445	.00260	-.29749	-.11943
0	3.000	.023	1.30263	.63380	.01488	.00100	.00505	1.43841	1.21103

SID 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. USE EDPM PROGRAMS 2K176+1991 JOB NO. (3509-14)

SAL NO. 199 RUN NO. 4

THETA=160. CONFIGURATION..(6)

TEST NO.	RUN. LOG	ALPHA C	CX	CPM	CYM. STAB	CRM. STAB (DP/Q)B	(L/D)		
MACH NO.	REIT	YAW C	(CN) BODY	(CY) BODY	CYM. BODY	CRM. BODY	(X CP/D)		
1201	4.030	160.114	.38016	1.11395	-.04481	.02083	.00144	-.10947	.34128
1575	2.000	.050	.02203	-1.17683	.02110	-.c1910	-.00845	1.11395	1.35706

0	.031	155.082	.43353	1.07476	-.03123	.01945	-.00005	-.13310	.40337	
0	2.000	.045	.06025	-1.15733	.01801	-.01765	-.00815	1.07476	.85488	
0	.032	153.070	.45436	1.03880	-.02645	.01864	-.00039	-.12758	.43739	
A-6	0	3.000	.044	.06595	-1.13190	.01775	-.01679	-.00810	1.03880	.85137
0	.033	151.058	.47326	1.00755	-.02123	.02052	-.00094	-.12680	.46972	
0	3.000	.050	.07396	-1.11070	.02127	-.01841	-.00911	1.00755	.83885	
SID	0	.034	149.056	.50307	.99487	-.01774	.01865	-.00166	-.14649	.50566
	0	3.000	.042	.08064	-1.11192	.01608	-.01684	-.00817	.99487	.83340
	0	.035	165.071	.25226	1.14191	-.05264	.02445	.00370	-.06850	.22091
	0	2.000	.063	.05108	-1.16832	.02808	-.02267	-.00989	1.14191	.55875
	0	.036	170.091	.17385	1.19750	-.06444	.02176	.00463	-.08121	.14518
	0	2.000	.052	.03548	-1.20953	.02094	-.02084	-.00832	1.19750	.43472

SID 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. USE EDPM PROGRAMS 2K176+1991 JOB NO. (3509-14)

RUN NO. 5

THETA= 60, CONFIGURATION. (4)

SAL NO.	199	TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB (DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CD	(X CP/D)	
1201	5.037	61.108	.01479	1.47321	.58515	.00313	-.00959	-0	.01004	
1575	2.000	-.032	1.29685	.69910	-.01714	-.00688	-.00737	1.47321	1.15121	
0	.038	51.076	.31600	1.27993	.54084	.00058	-.00535	-0	.24688	
0	2.000	-.021	1.19420	.55853	-.01085	-.00379	-.00381	1.27993	1.15288	
0	.040	71.291	-.15646	1.47891	.63252	.00315	-.00639	-.33197	-.10579	
0	2.000	-.030	1.35043	.62288	-.01495	-.00504	-.00503	1.47891	1.16838	

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NAA SISD SUPersonic AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN LOG THETA=140, CONFIGURATION..(6)

RUN NO. 6

TEST NO.	RUN LOG	ALPHA C	CL	CPM	CX	CRM. STAB	DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CRM. BODY	CD	(X CP/D)
1201	6.042	139.565	.56048	.90818	.00301	.01662	.00140	-.23342
1575	2.000	.040	.16291	-1.05470	.01479	-.01174	-.01185	.90818
0	.044	137.524	.56375	.95319	-.00236	.01654	.00073	-.33008
0	2.000	.038	.22835	-1.08362	.01284	-.01170	-.01171	.95319
0	.045	135.468	.54377	.90957	.00144	.01580	.00028	-.32740
A-8	0	3.000	.035	.25071	-1.02964	.01186	-.01106	-.01129
0	.046	130.322	.48226	.81993	.00845	.01351	-.00082	-.32551
0	2.000	.028	.31344	-.89811	.00786	-.00936	-.00977	.81993
0	.048	141.582	.54491	.88119	.00339	.01753	.00226	-.18302
0	2.000	.045	.12112	-1.02896	.01818	-.01233	-.01267	.88119
0	.049	143.615	.54573	.92887	-.00259	.01953	.00318	-.19490
0	2.000	.051	.11219	-1.07147	.02174	-.01383	-.01415	.92887
0	.050	145.600	.50781	.91106	-.00532	.01986	.00360	-.14054
0	2.000	.053	.09622	-1.03857	.02289	-.01435	-.01420	.91106

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SID 62-343

~~CONFIDENTIAL~~.55738
.82147.58752
.78033.58752
.78033

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. (USE EDPM PROGRAMS 2K176+1991) JOB NO. (3509-14)

THETA=140, CONFIGURATION. (6) RUN NO. 6
SAI No. 199

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYN. STAB	CRM. STAB	(DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYN. BODY	CRM. BODY	CD	(X CP/D)

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SID 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

RUN NO. 7

TEST NO. 40, CONFIGURATION..(4)

SAL NO.	199	TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM STAB	CRM STAB (DP/Q)B (L/D)	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CRM BODY	CD (X CP/D)
1201	7.055		41.488	.41960	1.16117	.38929	.00775	-.00464	-.12037	.36136						
1575	3.000		-.026	1.08348	.59199	-.01659	.00274	-.00861	1.16117	1.05930						
0	.056	36.190	.39402	1.07389	.30928	.00872	-.00015	-.13810	.36691							
0	2.000	-.002	.95202	.63415	-.00708	.00695	-.00528	1.07389	1.02487							
0	.057	30.841	.30952	.99872	.24709	.01171	-.00040	-.15702	.30991							
0	2.000	-.004	.77768	.69889	-.01010	.00985	-.00635	.99872	1.01773							
A-10	0															
0	.058	51.752	.19824	1.41111	.51699	.00717	-.00600	0	.14048							
0	2.000	-.037	1.23081	.71809	-.02008	-.00028	-.00934	1.41111	1.12004							

SID 62-343

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) J08 NO.(3509-14)

SAL NG. 199

THETA=120, CONFIGURATION..(6)

RUN NO. 8

TEST NG.	RUN.LOG	ALPHA C	CL	CX	CPM	CYM.STAB	CRM.STAB (DP/Q)B (L/D)	CYM.BODY	CRM.BODY	CD	(X CP/D)
MACH NG.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY						
1201	8.060	120.499	.30344	.68247	.01441	.00770	-.00081	-.29853	-.44463		
1575	2.000	-.011	.43428	-.60766	-.00090	-.00460	-.00622	-.68247	.355571		
0	.061	115.312	.19932	.63618	.01442	.00531	-.00087	-.29516	.31331		
0	2.000	-.004	.49005	-.45200	-.00382	-.00306	-.00443	-.63618	.32384		
0	.062	110.128	.09206	.60039	.01367	.00384	-.00102	-.27150	.15333		
0	2.000	-.001	.53215	-.29285	-.00610	-.00227	-.00326	-.60039	.29815		
0	.063	125.692	.40544	.75469	.01341	.00989	-.00101	-.32007	.53722		
0	2.000	-.016	.37671	-.76944	.00003	-.00659	-.00745	.75469	.39608		
0	.064	130.868	.48399	.83513	.01167	.01255	.00195	-.33192	.57953		
0	2.000	.032	.31526	-.91231	.01112	-.00674	-.01077	.83513	.44771		

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SID 62-343

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

THETA= 20, CONFIGURATION. (4)

RUN NO. 9

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM-STAB	CRM-STAB (DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY	CD (X CP/D)
1201	9.065	20.548	.17636	.93200	.08608	.01498	.00015	-.14717 .18922
1575	2.000	-.004	.49221	.81083	-.01256	.01408	-.00512	.93200 .87489
0	.066	15.279	.17039	.85547	-.01855	.01273	-.00062	-.09733 .19918
0	2.000	-.003	.38977	.78035	-.00797	.01212	-.00395	.85547 .65241
0	.067	10.074	.14418	.83086	-.05770	.01436	-.00135	-.11837 .17353
0	2.000	-.003	.28726	.79284	-.00931	.01390	-.00384	.83086 .49915
0	.068	25.810	.15442	1.10828	.17764	.01864	.00160	-.30465 .13934
0	3.000	-.002	.62148	.93054	-.01264	.01748	-.00667	1.10828 .98584
SHD	0	.069	31.175	.22693	1.15031	.25157	.01281	.00094 -.31395 .19727
SHD	0	2.000	-.007	.78953	.866680	-.01183	.01145	-.00582 1.15031 1.01863

NAA SISD SUPersonic AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO.	199	TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM. BODY	CRM. BODY	CD	(X CP/D)		
1201	10.070	99.463	-0.08290	.59354	.00738	.00203	-.00107	-.25919	-.13968		
1575	2.000	-.009	.59910	-.01561	-.01017	-.00138	-.00183	.59354	.25386		
0	.071	94.317	-14.917	.61531	-.03717	.00198	-.00057	-.26865	-.24244		
0	2.000	-.008	.62476	.10262	-.00882	-.00071	-.00193	.61531	.17082		
0	.072	89.177	-20.538	.64822	-.08690	-.00003	-.00083	-.28529	-.31683		
A-13	0	2.000	-.017	.64514	.21485	-.01412	-.00083	.00002	.64822	.08566	
0	.073	104.622	-.00083	.60406	.01144	.00291	-.00085	-.26833	-.00137		
0	2.000	-.006	.58475	-.15149	-.00873	-.00155	-.00260	.60406	.27484		
0	.074	109.792	.08918	.61933	.01435	.00384	-.00010	-.29088	.14399		
0	3.000	-.001	.55266	-.29342	-.00414	-.00139	-.00358	.61933	.29729		

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT • (USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL No. 199 THETA= 0, CONFIGURATION..(2) RUN NO. 11

TEST NO.	RUN LOG	ALPHA C.	CL	CX	CPM	CYM-STAB	CRM-STAB (DP/Q)B (L/D)	CD	(X CP/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM-BODY	CRM-BODY	CD	(X CP/D)
1201	11.076	-.003	.00735	.83666	-.01198	.01119	.00032	-.26715	.00878
1575	2.000	-.009	.00731	.83666	-.01164	.01119	.00032	.83666	-.93963
0	.077	-1.056	-.02558	.85782	.00778	.C1015	.00040	-.33199	-.02982
0	2.000	-.010	-.04137	.85721	-.01113	.01014	.00058	.85782	.51204
0	.078	-2.116	-.06387	.88355	.02998	.00872	.00040	-.33435	-.07229
A-14	0	2.000	-.008	-.09644	.88059	-.00918	.00870	.00072	.88355
0	.079	-3.166	-.08965	.91333	.04469	.00896	.00039	-.33907	-.09816
0	2.000	-.009	-.13996	.90699	-.00995	.00892	.00088	.91333	.38070
SID	0	.080	-4.210	-.10762	.94191	.05607	.00906	.00033	-.34457
62-343	0	2.000	-.010	-.17646	.93147	-.01032	.00901	.00100	.94191
0	.081	-5.250	-.12173	.96529	.06645	.00672	.00047	-.34856	-.12610
0	2.000	-.006	-.20952	.95011	-.00713	.00665	.00109	.96529	.38287
0	.082	1.046	.03896	.84979	-.03349	.00957	.00058	-.33048	.04585
0	2.000	-.007	.05446	.84894	-.00971	.00957	.00041	.84979	.08503

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT... (USE EDPM PROGRAMS 2K176+1991 JOB NO. (3509-14)

SAL NO. 199 THETA= 0, CONFIGURATION..(2) RUN NO. 12

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CD (X CP/D)
1201	12.088	-003	.00713	.83562	-.01169	.01027	.00068	-.32813 .00854
1575	2.000	-008	.00709	.83562	-.01034	.01027	.00068	.83562 -.94827
0	.090	-.021	.00470	.91189	-.02339	.07664	.00151	-.30533 .00521
0	2.000	-3.303	.00437	.90339	-.17361	.C7663	.00154	.90339 -.65284
0	.092	.008	.00758	.90154	-.00316	-.C6085	.00053	-.30981 .00848
0	2.000	3.293	.00772	.89393	.15830	-.06085	.00053	.89393 .29015
0	.094	.018	.00744	.91632	.00471	-.08498	.00027	-.25947 .00832
0	2.000	6.486	.00772	.89366	.25126	-.08498	.00029	.89366 1.31051

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199 THE TA= 0, CONFIGURATION..(2) RUN NO. 13

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM. BODY	CRM. BODY	CD	(X CP/D)
1201	13.095	8.339	.13952	1.02664	-.09521	.01546	.00300	-.34551	.13590
1575	2.000	-.021	.28692	.99556	-.01961	.01573	.00073	1.02664	.36819
0	.096	8.326	.13167	1.04038	-.09755	.04971	.00831	-.34043	.12729
0	2.000	-3.252	.28003	1.00442	-.13517	.05038	.00102	1.03438	.35167
0	.097	8.340	.13259	1.03391	-.08623	-.01916	-.00236	-.35025	.12868
0	2.000	3.200	.28061	1.00023	.09255	-.01930	.00044	1.03035	.39269
0	.099	8.344	.11841	1.04889	-.06582	-.04160	-.00610	-.35379	.11456
0	4.000	6.418	.26712	1.00554	.19426	-.04204	0	1.03365	.45358
SID 0	.102	8.337	.12525	.82244	-.03147	-.04761	-.00746	-.09437	.15934
62-343 0	2.000	9.637	.23789	.75960	.28357	-.04819	-.00048	.78606	.56772

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SID 0

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO. (3509-14)

SAL NO. 199

TEST NO. RUN. LOG ALPHA C CL CX CPM CYM. STAB CRM. STAB (DP/Q)B (L/D)

RUN NO. 14

MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CRM.BODY CD (X CP/D)

THETA= 0, CONFIGURATION..(2)

1201	14.103	4.198	.09709	1.02749	-.06091	-.05724	-.00380	-.33813	.09538
1575	2.000	4.316	.17133	1.00813	.16505	-.05736	.00039	1.01796	.34449
0		.104	6.268	.10420	1.02777	-.05833	-.05624	-.00625	-.34591 .10313
0		3.000	6.437	.21387	.99296	.21202	-.05659	-.00007	1.01037 .42727

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO. (3509-14)

SAL NO. 199

THETA= 80, CONFIGURATION.(3)

RUN NO. 15

TEST NO.	RUN. LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB (DP/Q)B (L/D)
MACH NO.	REIT	YAW C	(CN)BGDY	(CY)BGDY	(CA)BGDY	CYM.BODY	CRM.BODY CD (X CP/D)

1201	15.106	80.666	-0.23527	1.32139	0.34316	.00899	.00411	-0.32003	-0.17805
1575	2.000	.023	1.26562	.44681	.00399	.00551	-0.00821	1.32139	.97114
0	.107	70.447	-0.14625	1.38192	.30212	.01200	.00432	-0.34660	-0.10583
0	2.000	-.012	1.25314	.60061	-.00275	.00809	-.00986	1.38192	.94109
0	.108	90.982	-.22623	1.2637	.39292	.01017	-.00071	-.29801	-0.17865
A-19	0	2.000	-.004	1.27000	.20488	-.00630	-.00088	-.01016	1.26637 1.00939

SID 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN LOG ALPHA C CL CX CPM CYM STAB CRM STAB (DP/Q)B (L/D) RUN NO. 16

MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CRM BODY CD (X CP/D)

1201	16.109	80.649	-.22585	1.25037	.22836	.00804	.00389	-.23769	-.18062	
1575	2.000	.026	1.19694	.42633	.00649	.00515	-.00730	1.25037	.89079	
0	.110	70.503	-.16741	1.31630	.26376	.01228	.00356	-.34982	-.12718	
0	2.000	-.012	1.18481	.59740	-.00326	.00745	-.01039	1.31630	.92262	
0	.111	90.959	-.20753	1.19487	.27825	.00941	.00043	-.30607	-.17369	
A-20	0	2.000	-.005	1.19812	.18787	-.00496	-.00027	-.00941	1.19487	.93224

SID 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION.(4)

RUN NO. 17

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM STAB	CRM STAB	(DP/Q)B (L/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM BODY	CRM BODY	CD (X CP/D)

1201	17.113	-.006	.00390	.88586	-.00998	.00066	.00029	-.34150	.00440	
1575	2.000	.007	.00381	.88586	.00230	.00066	.00029	.88586	-.1.92196	
	0	.114	-1.052	-.01875	.87940	.00272	.00061	.00046	-.33893	-.02133
	0	2.000	.005	-.03489	.87891	.00160	.00060	.00047	.87940	.62189
	0	.115	-2.100	-.04447	.87467	.01660	.00142	.00064	-.33790	-.05084
A-21	0	2.000	-.001	-.07648	.87245	-.00053	.00139	.00069	.87467	.48299
	0	.116	-3.147	-.06423	.90479	.02653	.00314	.00058	-.34066	-.07099
	0	2.000	-.002	-.11379	.89990	-.00299	.00311	.00076	.90479	.46684
\$ID	0	.117	-5.219	-.08088	.93268	.03430	.00341	.00060	-.33790	-.08672
62-343	0	3.000	-.005	-.16537	.92146	-.00451	.00334	.00090	.93268	.49259
	0	.118	1.040	.02650	.88908	-.02273	.00004	.00042	-.33559	.02981
	0	2.000	.009	.04263	.88845	.00369	.00005	.00042	.88908	.16686
	0	.119	2.090	.05313	.88394	-.03725	.00069	.00036	-.33637	.06011
	0	2.000	.008	.08533	.88142	.00257	.00070	.00033	.88394	.26349

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NAA SJSD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JGB NO.(13509-14)

SAL NO. 199

THETA= 0, CONFIGURATION••(4)

RUN NO. 17

TEST NO.	RUN.LOG	ALPHA_C	CL	CX	CPM	CYM-STAB	CRM-STAB (DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY	CD (X CP/D)
1201	17.120	3.131	.06671	.93108	-.04499	-.00156	.00038	-.34181 .07164
1575	2.000	.014	.11746	.92605	.00660	-.00154	.00046	.93108 .31698
0	.121	5.217	.09392	.94770	-.05528	.00269	.00070	-.34141 .09910
0	2.000	-0	.17969	.93524	-.00201	.00274	.00045	.94770 .39237
0	.122	7.290	.11022	.99165	-.06750	.01003	.00211	-.34417 .11115
A-22	0	3.000	-.020	.23514	.96965	-.01512	.01022	.00082 .99165 .41296
0	.124	10.391	.10706	1.03959	-.05941	.01048	.00233	-.33509 .10298
0	3.000	-.019	.29278	1.00323	-.01510	.01073	.00040	1.03959 .49708

GID 62-343

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SAL NO.	199	TEST NO.	RUN LOG	ALPHA C	CL	CX	CPH	CYM. STAB	(DP/Q)B	(L/D)	RUN NO.	18
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CD	(X CP/D)			
1201	18.125	-0.005	.00484	.88137	-0.01027	.00018	.00050	-0.33981	.00549			
1575	2.000	.008	.00477	.88137	.00297	.00018	.00050	.88137	-1.45375			
0	126	-0.017	.00436	.87409	-0.01975	.05606	.00148	-0.31461	.00503			
0	2.000	-3.270	.00410	.86717	-0.14613	.05606	.00149	.86717	-4.11842			
0	127	.009	.00879	.85371	-0.00412	-.04554	.00042	-.31776	.01037			
0	2.000	3.256	.00892	.84751	.13313	-.04554	.00043	.84751	.23777			
0	130	.016	.00609	.80400	.00494	-.05276	.00022	-.16479	.00775			
0	2.000	6.437	.00630	.78554	.20882	-.05276	.00024	.78554	1.48314			

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\$ID 62-343

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(4)

RUN NO. 19

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPH	CYH-STAB	CRM-STAB	(DP/Q)B (L/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CRM.BODY	CRM.BODY	CD (X CP/D)

1201	19.132	8.322	.10893	1.00868	-.06526	.01053	.00229	-.34254 .10799
1575	3.000	-.017	.25375	.98229	-.01445	.01075	.00075	1.00868 .44283
0	.133	8.318	.10952	1.02490	-.07195	.03817	.00651	-.34136 .10742
0	2.000	-3.242	.25583	.99302	-.12285	.03871	.00092	1.01958 .41876
0	.134	8.345	.12088	1.01099	-.06255	-.01291	-.00126	-.34537 .11995
A-24	0	2.000	3.197	.26582	.97952	.08662	-.01296	.00062 1.00772 .46471
0	.135	8.349	.10664	1.02807	-.04197	-.02613	-.00382	-.34616 .10516
0	4.000	6.415	.25273	.98785	.18209	-.02640	.00001	1.01408 .53391
0	.136	8.345	.11018	.86264	-.01370	-.02323	-.00396	-.15397 .13279
\$ID	62-343	0	2.000	9.637	.22942	.80499	.26636	-.02356 -.00054 .82976 .64027

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14))

SAL NO. 199

TEST NO. RUN LOG

THETA= 0, CONFIGURATION.(4) RUN NG. 20

TEST NO. RUN LOG ALPHA C CL CX CPM CYM. STAB CRM. STAB (DP/Q)B (L/D)

MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CRM.BODY CD (X CP/D)

1201	20.138	4.185	.07814	.95277	-.03859	-.04155	-.00256	-.32577	.08272
1575	2.000	4.291	.14686	.93639	.14438	-.04163	.00048	.94461	.43722
0	.139	6.273	.09665	.99867	-.04036	-.04038	-.00433	-.32735	.09836
0	2.000	6.431	.20341	.96619	.19847	-.04061	.00011	.98262	.50159

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NAA SI SD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. (USE EDPM PROGRAMS 2K176+199) JOB NO. (3509-14)

SAL NO. 199

TEST NO. RUN LOG ALPHA C CL CX CPM CYM. STAB CRM. STAB IDP/Q1B (L/D)

MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CRM. BODY CO (X CP/D)

1201 21.141 -.008 .00290 .76867 -.01061 .01201 .00012 -.31447 .00378

1575 3.000 -.012 .00279 .76867 -.01339 .01201 .00012 .76867 -3.09939

0 142 -1.054 -.02855 .77731 .01145 .01151 -0 -.31919 -.03673

0 3.000 -.012 -.04284 .77666 -.01288 .01150 .00021 .77731 .43270

0 143 -2.099 -.05818 .80376 .03193 .01203 .00006 -.32783 -.07238

A-26 0 2.000 -.011 -.08758 .80109 -.01291 .01202 .00050 .80376 .33544

0 144 -3.145 -.08486 .82805 .04981 .01170 .00002 -.33571 -.10249

0 2.000 -.011 -.13016 .82215 -.01255 .01168 .00067 .82805 .31730

SID 0 145 -5.221 -.11837 .88648 .07573 .01C14 -.00001 -.35049 -.13353

62-343 0 2.000 -.008 -.19854 .87204 -.01019 .01010 .00092 .88648 .31858

0 146 -10.391 -.14540 .97740 .09317 .00859 -.00032 -.33251 -.14876

0 2.000 -.002 -.31927 .93516 -.00681 .00851 .00123 .97740 .40817

0 147 1.042 .03853 .77998 -.03403 .01549 .00049 -.31952 .04940

0 3.000 -.018 .05271 .77915 -.01798 .01549 .00021 .77998 .05441

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NG.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION.(1)

RUN NO. 21

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB (DP/Q)B (L/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	CYM.BODY	CRM.BODY	CD IX CP/D

1201	21.148	2.088	.06776	.80267	-.05423	.01512	.00069 -.32514 .08441
1575	3.000	-.019	.09695	.79966	-.01831	.01514	.00014 .80267 .14065
0	.149	3.131	.09344	.82894	-.07271	.01608	.00086 -.32907 .11273
0	3.000	-.021	.13858	.82260	-.01966	.01610	-.00002 .82894 .17532
0	.150	5.216	.13379	.90169	-.10335	.01488	.00167 -.34322 .14838
A-27	0	2.000	-.021	.21519	.88580	-.01883	.01497 .00031 .90169 .21972
0	.151	7.287	.15209	.95316	-.11894	.01364	.00239 -.35186 .15956
0	2.000	-.019	.27173	.92618	-.01745	.01384	.00064 .95316 .26230
0	.152	10.377	.14908	1.00847	-.11827	.01351	.00261 -.34243 .14783
SID	0	3.000	-.020	.32826	.96514	-.01784	.01376 .00013 1.00847 .33969
0	.153	-.008	.00345	.76868	-.01070	.01263	.00030 -.31885 .00448
0	2.000	-.012	.00335	.76868	-.01361	.01263	.00030 .76868 -2.49864

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NAA SISD SUPERSONIC AERG LABORATORY TEST DATA PRINTOUT.. (USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN LOG ALPHA C CL CX CPM CYM STAB CRM STAB (DP/QIB (L/D) MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CRM BODY CD IX CP/DI)

RUN NO. 22

THETA= 0, CONFIGURATION..(3)

JOB NO.(3509-14)

1201	22.154	-.005	.00643	.85060	-.01248	.00618	-.01069	-.33690	.00756						
1575	2.000	-.003	.00635	.85060	-.00553	.00618	-.01069	.85060	-1.26355						
0	.155	-1.039	-.00420	.84735	-.00649	.00640	-.00867	-.33847	-.00496						
0	2.000	-.003	-.01955	.84714	-.00584	.00656	-.00855	.84735	1.03186						
0	.156	-2.081	-.02589	.83355	.00590	.00704	-.00561	-.33768	-.03106						
A-28	0	2.000	-.005	-.05614	.83206	-.00709	.00724	-.00535	.83355	.59497					
0	.157	-3.127	-.05114	.83011	.02078	.00714	-.00468	-.34869	-.06161						
0	2.000	-.005	-.09633	.82608	-.00712	.00739	-.00429	.83011	.48430						
0	.158	-5.215	-.09813	.84642	.04989	.00706	-.00063	-.35576	-.11593						
0	3.000	-.005	-.17464	.83400	-.00699	.00709	.00002	.84642	.41430						
0	.159	-10.395	-.12173	.97625	.05841	.00704	.00103	-.35891	-.12469						
0	2.000	-.001	-.29585	.93827	-.00524	.00674	.00229	.97625	.50256						
0	.160	1.027	.01554	.84590	-.01767	.00758	-.00894	-.33925	.01837						
0	2.000	-.007	.03070	.84549	-.00800	.00742	-.00908	.84590	.12448						

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION.(3)

RUN NO. 22

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CD (X CP/D)

1201	22.161	2.069	.03651	.83837	-.03043	.00839	-.00879	-.33925 .04355
1575	2.000	-.009	.06674	.83650	-.00932	.00807	-.00909	.83837 .24412
0	162	3.113	.05991	.83490	-.04454	.00964	-.01019	-.33690 .07176
0	2.000	-.012	.10515	.83041	-.01117	.00908	-.01070	.83490 .27641
0	163	5.204	.10894	.84758	-.07387	.01048	-.00978	-.34083 .12853
A-29	0	2.000	-.014	.18535	.83421	-.01225	.00955	-.01069 .84758 .30148
0	164	7.286	.13636	.92029	-.09310	.01019	-.00398	-.35104 .14817
0	3.000	-.016	.25195	.89557	-.01299	.00960	-.00524	.92029 .33050
0	165	10.384	.13228	.99196	-.08667	.01119	-.00755	-.34476 .13335
0	3.000	-.018	.30888	.95188	-.01407	.00965	-.00944	.99196 .41939

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. (USE EDPM PROGRAMS 2K176+1991) JOB NO. (3509-14)

SAL NO. 199

TEST NO. RUN.LOG

THETA= 20, CONFIGURATION. (9)

RUN NO. 23

MACH NO.	RELT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CD	(X CP/D)
TEST NO.	RUN.LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	DP/QJB	IL/D
1201	23.168	20.445	.17897	.94760	-.00552	.02087	.00230	-.16320	.18886
1575	2.000	-.016	.49863	.82543	-.00895	.02036	-.00514	.94760	.68894
0	.170	15.255	.17628	.86740	-.04750	.01533	-.00049	-.12132	.20323
0	2.000	-.004	.39826	.79047	-.00953	.01466	-.00450	.86740	.58073
0	.171	10.077	.17376	.81398	-.09436	.01673	-.00142	-.11974	.21347
A-30	0	2.000	-.003	.31348	.77102	-.01096	.01622	-.00432	.81398
0	.173	25.670	.18297	1.11144	.02490	.02800	.00630	-.30806	.16462
0	2.000	-.029	.64629	.92254	-.00936	.02797	-.00645	1.11144	.73853
0	.173	25.721	.23942	1.00239	.02519	.02515	.00580	-.18623	.23885
0	2.000	-.033	.65066	.79922	-.00568	.02518	-.00569	1.00239	.73872
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0	.175	30.926	.18666	1.14116	.09982	.02690	.00878	-.31435	.16357
0	2.000	-.036	.74651	.88307	-.00645	.02759	-.00629	1.14116	.83371

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JGB NO.(3509-14)

SAL NO. 199

THETA= 20, CONFIGURATION.(3)

RUN NO. 24

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM-STAB	OP/QIB	(L/D)		
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM.BODY	CRM.BODY	CD	(X CP/DI)	
1201	24.176	20.423	.15242	.93468	.01354	.01040	-.00204	-.18967	.16307	
1575	3.000	-.024	.46894	.82277	-.01708	.00903	-.00554	.93468	.72888	
0	.177	15.234	.16482	.83728	-.04833	.01480	-.00201	-.13902	.19685	
0	4.000	-.019	.37899	.76457	-.01841	.01375	-.00583	.83728	.57247	
0	.178	10.082	.16739	.80554	-.08303	.00867	-.00135	-.17724	.20780	
A-31	0	2.000	-0	.30580	.76381	-.00646	.00830	-.00285	.80554	.42849
0	.179	25.654	.15824	1.06054	.05756	.01767	-.00168	-.30902	.14921	
0	2.000	-.049	.60171	.88754	-.03227	.01520	-.00917	1.06054	.79566	
SID	0	.180	30.935	.21134	1.10742	.09024	.01282	-.00173	-.31893	.19084
	0	2.000	-.039	.75048	.84132	-.02433	.01010	-.00807	1.10742	.82025

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. (USE EDPM PROGRAMS 2K176+1991) JOB NO. (3509-14)

SAL NO. 199 THETA= 0, CONFIGURATION.= (9) RUN NO. 25

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B	(L/D)	
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CD	(X CP/D)	
1201	25.181	-.025	.00462	.86132	-.02627	.00693	.00069	-.33588	.00537	
1575	2.000	-.004	.00425	.86132	-.00639	.00693	.00069	.86132	-.547790	
0	182	-1.081	-.03259	.84830	-.00426	.00744	.00067	-.33116	-.03842	
0	2.000	-.006	-.04859	.84754	-.00753	.00743	.00081	.84830	.78766	
0	183	-2.135	-.06336	.88651	.01331	.00590	.00060	-.33509	-.07148	
A-32	0	2.000	-.001	-.09635	.88353	-.00439	.00587	.00082	.88651	.56186
0	185	-3.192	-.09717	.90372	.03324	.00828	.00044	-.33745	-.10752	
0	2.000	-.007	-.14732	.89691	-.00849	.00824	.00090	.90372	.47437	
0	186	-5.273	-.12101	.96011	.04618	.00574	.00068	-.35083	-.12604	
0	2.000	-.003	-.20871	.94493	-.00532	.00566	.00121	.96011	.47875	
0	187	-10.445	-.13834	.95369	.03374	-.00007	.00099	-.26507	-.14505	
0	2.000	-.004	-.30891	.91281	.00187	-.00025	.00096	.95369	.59077	
0	188	1.031	.04095	.85184	-.04797	.00836	.00072	-.33273	.04807	
0	2.000	-.007	.05627	.85097	-.00855	.00837	.00057	.85184	-.15248	

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14))

SAL NO. 199

TEST NO. RUN.LOG

MACH NO.	RELT	YAW C	(CN) BODY	(CA) BODY	CY	CPM	CYM. STAB	CRM. STAB	(DP/Q)B	(LD)

SAL NO.	TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B	(LD)	
1201	25.189	2.084	.07319	.85395	-.06658	.00818	.00085	-.33273	.08571		
1575	2.000	-.007	.10420	.85072	-.00864	.00821	.00055	.85395	.06102		
0	.190	3.141	.10491	.88851	-.08439	.00845	.00101	-.33745	.11808		
0	4.000	-.004	.15343	.88143	-.00767	.00849	.00055	.88851	.14997		
0	.191	5.230	.13496	.96733	-.10137	.00987	.00155	-.35083	.13952		
A-33	0	2.000	-.007	.22255	.95101	-.00992	.00997	.00065	.96733	.24451	
0	.192	7.293	.13845	1.00465	-.10465	.01592	.00278	-.35161	.13781		
0	2.000	-.018	.26483	.97896	-.01849	.01614	.00074	1.00465	.30484		
0	.193	10.385	.13086	1.04759	-.09741	.01688	.00357	-.33667	.12492		
0	2.000	-.022	.31752	1.00686	-.02083	.01725	.00047	1.04759	.39321		

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) J0B NO.(3509-14)

SAL NO. 199

THETA= 20, CONFIGURATION..(1)

RUN NO. 26

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM	CRM. STAB	(DP/Q)B	(L/D)	CD	(X CP/D)
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY				

1201	26.194	20.353	.16130	.93760	-.05509	.01340	-.00006	-.17350	.17203		
1575	2.000	-.004	.47727	.82300	-.01124	.01255	-.00471	.93760	.58458		
0	.197	15.200	.16850	.85002	-.08142	.01149	-.00078	-.13491	.19823		
0	2.000	-.005	.38543	.77612	-.01030	.01089	-.00376	.85002	.48875		
0	.198	10.073	.18619	.79851	-.11516	.01041	-.00131	-.15066	.23318		
A-34	0	2.000	-.002	.32296	.75364	-.00668	.01003	-.00311	.79851	.34342	
0	.199	25.502	.13406	1.07499	-.03813	.01460	-.00071	-.30814	.12471		
0	3.000	-.024	.58375	.91259	-.02009	.01288	-.00693	1.07499	.63468		
0	.201	30.746	.17874	1.09790	-.01784	.01287	-.00065	-.31601	.16280		
0	3.000	-.025	.71482	.85227	-.01925	.01073	-.00714	1.09790	.67504		

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JGB NO.(3509-14)

SAL NO. 199

THETA= 20, CONFIGURATION..(1)

RUN NO. 26

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B (L/D)	(X CP/D)
1201	26.194	20.353	.16130	.93760	-.05509	.01340	-.00006	-.17350	.17203
1575	2.000	-.004	.47727	.82300	-.01124	.01255	-.00471	.93760	.58458

MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	CYM. BODY	CRM. BODY	CD	(X CP/D)		
0	.197	15.200	.16850	.85002	-.08142	.01149	-.00078	-.13491	.19823	
0	2.000	-.005	.38543	.77612	-.01030	.01089	-.00376	.85002	.48875	
0	.198	10.073	.18619	.79851	-.11516	.01041	-.00131	-.15066	.23318	
A-34	0	2.000	-.002	.32296	.75364	-.00668	.01003	-.00311	.79851	.34342
0	.199	25.502	.13406	1.07499	-.03813	.01460	-.00071	-.30814	.12471	
0	3.000	-.024	.58375	.91259	-.02009	.01288	-.00693	1.07499	.63468	
0	.201	30.746	.17874	1.09790	-.01784	.01287	-.00065	-.31601	.16280	
0	3.000	-.025	.71482	.85227	-.01925	.01073	-.00714	1.09790	.67504	

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN LOG THETA= 20, CONFIGURATION..(2)

RUN NO. 27

MACH NO.	RELT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CX	CL	CPM	CYM	CRM	STAB	(DP/Q) B	(L/D)
1201	27.202	20.450	.17984	.95746	-.00284	.01986	.00175	-.15835				.18783	
1575	2.000	-.013	.50298	.83432	-.00919	.01922	-.00530	.95746				.69436	
0	0	.203	15.252	.17797	.88038	-.05178	.01348	-.00108	-.11503			.20215	
0	2.000	-.002	.40326	.80257	-.01043	.01272	-.00459	.88038				.57160	
A-35	0	.204	10.088	.17706	.82118	-.08965	.01459	-.00184	-.11109			.21561	
0	2.000	-.003	.31813	.77749	-.01158	.01404	-.00437	.82118				.41818	
0	0	.205	25.682	.19379	1.00932	.05026	.01715	-.00080	-.18986			.19200	
0	2.000	0	.61199	.82569	-.01227	.01511	-.00815	1.00932				.78212	
0	0	.205	25.632	.14024	1.11947	.04774	.01883	-.00065	-.18986			.12528	
0	2.000	-.003	.61064	.94868	-.01476	.01670	-.00873	1.11947				.77819	

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TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM	CRM	STAB	(DP/Q) B	(L/D)	
0	.206	30.940	.20242	1.14442	.09186	.01525	.00060	-.31590		.17688	
0	2.000	-.009	.76192	.87759	-.01463	.01339	-.00733	1.14442		.82057	

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT.. USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN LOG ALPHA C CL CX CPM CYM STAB (DP/Q)B (L/D)

RUN NO. 28

MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CRM. BODY CD (X CP/D)

	1201	28.207	20.421	.15926	.95782	-.00019	.01355	-.00063	-.16298	.16628
1575	3.000	- .003	.48339	.84209	-.01107	.01248	-.00532	.95782	.69962	
0	.208	15.232	.16716	.88237	-.05416	.01301	-.00121	-.11312	.18944	
0	2.000	- .003	.39307	.80747	-.01072	.01224	-.00459	.88237	.56222	
0	.209	10.074	.16473	.82251	-.08435	.01552	-.00183	-.10681	.20028	
A-36	0	2.000	- .003	.30604	.78102	-.01256	.01496	-.00452	.82251	.42438
0	.210	25.612	.12876	1.11164	.04779	.01575	-.00033	-.30268	.11583	
0	2.000	- .008	.59656	.94680	-.01456	.01406	-.00710	1.11164	.78011	
0	.211	30.907	.17622	1.14170	.09866	.01740	.00149	-.32395	.15435	
0	2.000	- .002	.73753	.88914	-.01329	.01569	-.00766	1.14170	.83377	

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT.. USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

RUN NO. 29

THETA= 20., CONFIGURATION.(11)

SAL NO. 199

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB (DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CRM. BODY	CD	(X CP/D)

1201	29.212	20.419	.15953	.96393	-.00366	.01695	.00051	-.16646	.16550	
1575	2.000	-.006	.48575	.84773	-.00977	.01606	-.00544	.96393	.69247	
0	.213	10.063	.16112	.81838	-.08967	.01675	-.00182	-.10752	.19688	
0	2.000	-.002	.30161	.77765	-.01302	.01618	-.00472	.81838	.40270	
0	.214	15.234	.17089	.87238	-.05800	.01348	-.00103	-.11774	.19589	
A-37	0	2.000	-.001	.39407	.79685	-.01012	.01273	-.00453	.87238	.55281
0	.215	25.611	.13011	1.10587	.04604	.02101	.00231	-.31575	.11766	
0	2.000	-.009	.59528	.94102	-.01175	.01994	-.00699	1.10587	.77734	
0	.216	30.913	.18140	1.13976	.09594	.02065	.00365	-.32754	.15916	
0	3.000	-.010	.74108	.88474	-.01122	.01959	-.00748	1.13976	.82946	

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K 176+199) JOB NO.(3509-14)

SAL NO. 199

TEST NO. 0. CONFIGURATION. (7)

RUN NO. 30

TEST NO. RUN LOG ALPHA C CL CX CPM CYM STAB (DP/QIB (L/D)

MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CYM BODY CRM BODY CD IX CP/D)

1201	30.217	-.007	.00193	.75429	-.00838	.00867	.00052	-.31739	.00256
1575	2.000	-.012	.00184	.75429	-.01098	.00867	.00052	.75429	-3.86105
0	.218	-1.054	-.02783	.76051	.00960	.00847	.00045	-.32368	-0.03660
0	2.000	-.011	-.04182	.75987	-.01050	.00846	.00060	.76051	.47041
0	.219	-2.099	-.05413	.78154	.02569	.01065	.00026	-.32368	-0.06926
0	2.000	-.013	-.08271	.77903	-.01265	.01064	.00065	.78154	.38939
0	.220	-3.140	-.07599	.81664	.04111	.01272	-.00001	-.33075	-0.09305
0	2.000	-.015	-.12060	.81125	-.01491	.01271	-.00069	.81664	.35912
0	.221	-5.220	-.11550	.87322	.07153	.00936	.00031	-.34646	-0.13227
0	2.000	-.005	-.19445	.85909	-.00870	.00930	.00116	.87322	.33216
0	.222	-10.386	-.14380	.95805	.09004	.00885	-.00020	-.33782	-0.15010
0	2.000	-.004	-.31414	.91644	-.00765	.00874	.00140	.95805	.41337
0	.223	1.041	.03254	.76398	-.02700	.01153	.00073	-.31739	.04260
0	2.000	-.015	.04641	.76326	-.01425	.01154	.00053	.76398	.11826

STD 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JGB NO.(13509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(7)

RUN NO. 30

TEST NO.	RUN.LOG	ALPHA C	CL	CX	CPM	CYM.STAB	CRM.STAB (DP/Q)B (L/D)	
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY CD (X CP/D)	
1201	30.224	2.086	.06013	.78654	-.04510	.01426	.00097 -.32603 .07645	
1575	2.000	-.020	.08871	.78383	-.01801	.01429	.00045 .78654 .19158	
0	.225	3.127	.08302	.81975	-.06223	.01560	.00131 -.33153 .10127	
0	2.000	-.022	.12760	.81400	-.01988	.01565	.00046 .81975 .21226	
0	.226	5.210	.12675	.87490	-.09583	.01545	.00172 -.34175 .14487	
A-39	0	2.000	-.022	.20566	.85978	-.01962	.01554	.00031 .87490 .23405
0	.227	7.279	.14494	.93277	-.11240	.01334	.00222 -.35117 .15539	
0	2.000	-.021	.26193	.90690	-.01775	.01352	.00051 .93277 .27088	
SID	0	.228	10.373	.14809	.99211	-.11616	.01196 .00267 -.34253 .14927	
62-343	0	3.000	-.022	.32428	.94924	-.01737	.01225 .00047 .99211 .34180	

CONFIDENTIAL

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

THETA= 0 CONFIGURATION••(5)

RUN NO. 31

TEST NO. RUN LOG ALPHA C CL CX CPM CYM STAB IDP/QJB (L/D)

MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CRM BODY CRM BODY CRM CP/D

1201 31.229 -.023 .00176 .76209 -.02085 .01301 .00055 -.31740 .00230

1575 2.000 -.019 .00145 .76209 -.01669 .01301 .00056 .76209 -13.64119

0 .230 -1.076 -.03662 .76551 .00315 .01172 .00044 -.32054 -.04784

0 2.000 -.015 -.05100 .76469 -.01434 .01171 .00066 .76551 .63814

0 .231 -2.123 -.06607 .79160 .02219 .01120 .00033 -.32761 -.08347

A-40 0 2.000 -.013 -.09535 .78860 -.01306 .01118 .00074 .79160 .46730

0 .232 -3.167 -.08958 .81875 .03745 .01081 .00039 -.33625 -.10941

0 2.000 -.011 -.13466 .81255 -.01216 .01077 .00098 .81875 .42194

0 .233 -5.247 -.12458 .88234 .06224 .01027 .00027 -.35039 -.14119

0 2.000 -.008 -.20474 .86725 -.01036 .01020 .00121 .88234 .39602

0 .235 -10.426 -.14657 .97637 .06565 .00947 -.00026 -.33076 -.15012

0 2.000 -.001 -.32081 .93374 -.00712 .00936 .00146 .97637 .49537

0 .236 1.028 .03683 .76600 -.04321 .01279 .00087 -.31819 .04809

0 2.000 -.018 .05057 .76522 -.01620 .01280 .00064 .76600 -.15442

SHD 62-343

CONFIDENTIAL

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

THETA= 0 CONFIGURATION. (5)

RUN NO. 31

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB (DP/Q)B (L/D)
MACH NO.	REI	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM. BODY	CRM. BODY CO (X CP/D)
1201	31.237	2.078	.07154	.78259	-.06621	.01339	.00096 -.32526 .09142
1575	2.000	-.020	.09987	.77948	-.01724	.01342	.00047 .78259 .03700
0	.238	3.122	.09655	.81468	-.08343	.01438	.00124 -.33311 .11852
0	2.000	-.022	.14077	.80821	-.01878	.01443	.00046 .81468 .10737
0	.239	5.204	.13306	.87884	-.10916	.01402	.00168 -.34647 .15141
A-41	0	2.000	-.023	.21221	.86315	-.01896	.01412 .00040 .87884 .18560
0	.240	7.274	.14699	.94079	-.12041	.01305	.00225 -.34725 .15624
0	3.000	-.022	.26490	.91461	-.01811	.01323	.00058 .94079 .24544
0	.241	10.369	.14985	.99679	-.12330	.01179	.00267 -.33861 .15033
0	3.000	-.021	.32677	.95355	-.01680	.01208	.00050 .99679 .32266

SID 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN LOG

RU NO. 32

THETA= 0, CONFIGURATION.. (8)

TEST NO. ALPHA C CL CX CPM CYM STAB IDP/Q)B (L/D)

MACH NO. REFL YAW C (CN) BODY (CA) BODY (CY) BODY CRM BODY CRM BODY CD IX CP/DI

1201	32.242	-.020	.00493	.74517	-.02310	.01210	.00065	-.30561	.00662
1575	2.000	-.014	.00467	.74517	-.01411	.01210	.00065	.74517	-.24839
0	.243	-1.070	-.03021	.75477	-.00068	.01134	.00047	-.30797	-.04002
0	2.000	-.010	-.04430	.75408	-.01206	.01133	.00068	.75477	.71533
0	.244	-2.119	-.06144	.77168	.01830	.01345	.00023	-.32525	-.07962
0	2.000	-.013	-.08993	.76888	-.01470	.01343	.00073	.77168	.49657
0	.245	-3.165	-.08565	.79637	.03229	.01434	.00012	-.33468	-.10755
0	2.000	-.012	-.12948	.79043	-.01480	.01432	.00091	.79637	.45062
0	.246	-5.235	-.11037	.87678	.05288	.01468	-.00030	-.34803	-.12588
0	2.000	-.008	-.18989	.86305	-.01364	.01464	.00104	.87678	.42155
0	.247	-10.422	-.14554	.96486	.06492	.01171	-.00078	-.33468	-.15084
0	2.000	-.009	-.31765	.92262	-.00502	.01166	.00135	.96486	.49561
0	.249	1.032	.04076	.74581	-.04437	.01319	.00081	-.31975	.05465
0	2.000	-.015	.05418	.74495	-.01524	.01321	-.00057	.74581	-.11898

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SID 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(8)

RUN NO. 32

TEST NO. RUN.L06 ALPHA C CL CX CPW CYM.STAB CRM.STAB (DP/Q)B (L/D)

MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CRM.BODY CD (X CP/D)

1201	32.250	2.079	.06936	.76849	-.06214	.01421	.00103	-.32603	.09025	
1575	2.000	-.016	.09718	.76547	-.01645	.01424	.00052	.76849	.06062	
0	.251	3.121	.09150	.79839	-.07642	.01407	.00122	-.32996	.11461	
0	2.000	-.017	.13483	.79223	-.01663	.01412	.00045	.79839	.13323	
0	.252	5.199	.12546	.85723	-.10060	.01503	.00169	-.34017	.14636	
A-43	0	2.000	-.018	.20261	.84234	-.01775	.01512	.00033	.85723	.20347
0	.253	7.272	.14593	.92517	-.11791	.01489	.00251	-.34709	.15773	
0	2.000	-.016	.26184	.89926	-.01695	.01509	.00061	.92517	.24969	
SID	0	.254	10.363	.14469	.98811	-.11872	.01303	.00265	-.34080	.14643
	0	3.000	-.019	.32005	.94597	-.01709	.01329	.00026	.98811	.32904

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. USE EDPM PROGRAMS 2K176+1991 JOB NO. (3509-14)

SAL NO. 199 THETA= 0, CONFIGURATION. (10) RUN NO. 33

TEST NO. RUN LOG ALPHA C CL CX CPM CYM. STAB CRM. STAB (DP/QIB (L/D)
MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CRM. BODY CO (X CP/D)

1201	33.255	-0.005	0.00641	.88424	-0.01282	.00611	.00084	-.33361	.00724
1575	2.000	-0.005	0.00632	.88424	-0.00637	.00611	.00084	.88424	-1.32751
0	.256	-1.050	-0.01380	.92747	-0.00111	.00477	.00075	-.34383	-.01488
0	2.000	-0.002	-0.03079	.92706	-0.00403	.00475	.00084	.92747	.73591
0	.257	-2.102	-0.04192	.93389	.01501	.00644	.00061	-.34305	-.04489
0	2.000	-0.005	-0.07614	.93172	-0.00671	.00642	.00085	.93389	.50284
0	.258	-3.155	-0.07049	.94270	.03139	.00944	.00038	-.33990	-.07478
0	2.000	-0.014	-0.12225	.93740	-0.01207	.00941	.00090	.94270	.44324
0	.259	-5.242	-0.10994	.98058	.05962	.00618	.00066	-.35091	-.11211
0	2.000	-0.007	-0.19904	.96644	-.00702	.00609	.00122	.98058	.40046
0	.261	-10.192	-0.14890	.95260	.25315	.00120	.00074	-.26125	-.15631
0	3.000	-0.002	-0.31508	.91123	-.00155	.00105	.00094	.95260	-.10346
0	.262	1.043	.02890	.93184	-.02449	.00048	.00066	-.34305	.03102
0	2.000	.012	.04586	.93116	.00434	.00049	.00065	.93184	.16603

SID 62-343

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14))

SAL NO. 199

THETA= 0. CONFIGURATION..(10)

RUN NO. 33

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B	(L/D)	
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CRM. BODY	CRM. BODY	CD	(X CP/D)	
1201	33.263	2.093	.05580	.93662	-.04064	.00499	.00079	-.34226	.05 58	
1575	2.000	-.003	.08997	.93395	-.00461	.00502	.00061	.93662	.24 34	
0	.264	3.149	.08873	.94929	-.06071	.00773	.00089	-.34147	.09347	
0	2.000	-.008	.14074	.94298	-.00870	.00777	.00046	.94929	.26865	
0	.265	5.235	.12464	.99191	-.08643	.01187	.00152	-.34698	.12566	
A-45	0	3.000	-.023	.21461	.97640	-.01776	.01196	.00043	.99191	.29727
0	.266	7.295	.12868	1.01964	-.09282	.01560	.00252	-.35484	.12620	
0	2.000	-.025	.25709	.99506	-.02106	.01580	.00052	1.01964	.33896	
0	.267	10.379	.11685	1.06179	-.08790	.01681	.00331	-.26440	.11005	
SID	0	3.000	-.025	.30619	1.02338	-.02203	.01713	.00023	1.06179	.41292

SID 62-343

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION.(11)

RUN NO. 34

TEST NO. RUN.LOG ALPHA C CL CX CPM CYM.STAB CRM.STAB (DP/Q)B (L/D)

MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CRM.BODY CD (X CP/D)

1201	34.268	-.021	.00868	.91233	-.02846	.00435	.00075	-.34132	.00952	
1575	2.000	-.003	.00835	.91234	-.00213	.00435	.00075	.91233	-2.70837	
0	.269	-1.070	-.01770	.90496	-.01273	.00810	.00067	-.34053	-0.01956	
0	2.000	-.003	-.03459	.90447	-.00713	.00808	.00082	.90496	1.06813	
0	.270	-2.108	-.03156	.88499	-.00625	.01475	.00027	-.33423	-0.03566	
A-46	0	2.000	-.020	-.06408	.88323	-.01825	.01473	.00082	.88499	.79746
0	.271	-3.171	-.06929	.92527	.01476	.00920	.00032	-.33817	-0.07489	
0	2.000	-.001	-.12037	.92002	-.00711	.00916	.00083	.92527	.57736	
0	.272	-5.266	-.11195	.97276	.04163	.00951	.00021	-.35076	-0.11509	
0	2.000	-.006	-.20074	.95838	-.00905	.00945	.00108	.97276	.49260	
0	.273	-10.395	-.13174	.98206	.07267	.00336	.00039	-.28465	-0.13415	
0	2.000	.009	-.30674	.94218	.00106	.00323	.00099	.98206	.46309	
0	.274	1.028	.03436	.88320	-.04298	.00159	.00078	-.33659	.03890	
0	2.000	.011	.05019	.88244	.00321	.00160	.00075	.88320	-0.15627	

SID 62-343

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14))

SAL NO. 199 THETA= 0, CONFIGURATION..(11)

RUN NO. 34

TEST NO.	RUN.LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B (L/D)
MACH NO.	RELT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY	CD (X CP/D)
1201	34.275	2.086	.06872	.89897	-.06182	.00655	.00084	-.33895 .07644
1575	2.000	-.004	.10139	.89588	-.00334	.00658	.00060	.89897 .09025

0	.276	3.130	.08429	.94080	-.06967	.00697	.00102	-.34368 .08960
0	2.000	-.001	.13553	.93479	-.00475	.00702	.00064	.94080 .18597
0	.277	5.204	.01031	.97593	-.07910	.00865	.00137	-.35076 .10381
0	2.000	-.005	.18940	.96272	-.00831	.00874	.00058	.97593 .28234
0	.278	7.279	.01412	.09719	.01843	.00290	-.34682	.12127
0	2.000	-.002	.25046	.99037	-.02198	.01865	.00054	1.01412 .31195
0	.279	10.367	.11390	1.06038	-.09315	.01755	.00354	-.33502 .10741
0	2.000	-.022	.30282	1.02258	-.02160	.01790	.00032	1.06038 .39241

SID 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JGB NO.(3509-14)

SAL NO. 199

THETA= 20., CONFIGURATION..(8)

RUN NO. 35

TEST NO.	RUN.LOG	ALPHA C	CL	CX	CPM	CY.M-STAB	CRM.M-STAB	(DP/Q)B (L/D)
MACH NO.	RELT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CY.M.BODY	CRM.BODY	CD (X CP/D)
1201	35.280	20.335	.15331	.92182	-.05709	.01051	-.00172	-.16807 .16631
1575	3.000	-.019	.46403	.81113	-.01504	.00925	-.00526	.92182 .57698
0	.282	15.190	.16667	.83828	-.08670	.01133	-.00072	-.12241 .19882
0	2.000	-.001	.38045	.76534	-.00866	.01074	-.00367	.83828 .47212
0	.283	10.055	.17360	.79456	-.11369	.00882	-.00125	-.17358 .21849
A ₄₈	0	2.000	-.001	.30964	.75205	-.00615	.00847	-.00277 .79456 .33283
0	.284	25.481	.12226	1.06142	-.03683	.01279	-.00248	-.30425 .11519
0	2.000	-.043	.56692	.90562	-.02609	.01048	-.00774	1.06142 .63503
0	.285	30.730	.17037	1.09053	-.01750	.01244	-.00105	-.29874 .15623
SID	0	3.000	-.027	.70362	.85041	-.01966	.01015	.00726 1.09053 .67513

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN.LG6 ITHETA= 20, CONFIGURATION..(7)

RUN NO. 36

TEST NO.	RUN.LG6	ALPHA C	CL	CX	CPM	CYM.STAB	CRM.STAB (DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CRM.BODY	CD	(X CP/D)
1201	36.286	20.336	.15224	.92413	-.05539	.01030	-.00024	-.16334 .16474
1575	3.000	-.003	.46385	.81366	-.00847	.00958	-.00380	.92413 .58059
0	.287	15.197	.16997	.85115	-.08553	.01303	-.00032	-.11926 .19970
0	2.000	-.003	.38711	.77684	-.00826	.01249	-.00372	.85115 .47906
0	.288	10.065	.17841	.80454	-.11117	.00926	-.00105	-.16807 .22175
0	2.000	-.004	.31624	.76099	-.00533	.00894	-.00265	.80454 .34846
A-49	0	.289	25.484	.12094	1.07338	-.03557	.01453	-.00079 -.30111 .11267
0	3.000	-.025	.57093	.91696	-.02053	.01278	-.00696	1.07338 .63770
0	.290	30.734	.17226	1.09440	-.01861	.01257	-.00110	-.31134 .15740
0	3.000	-.031	.70727	.85273	-.02110	.01025	-.00737	1.09440 .67369

SID 62-343

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NAA SISD SUPERSIGNIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199 THETA= 20, CONFIGURATION..(1) RUN NO. 38

TEST NO.	RUN.LOG	ALPHA C	CL	CX	CPM	CYM.STAB	CRM.STAB	(DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY	CD	(X CP/D)
1201	38.297	10.066	.17972	.80009	-.11239	.01038	-.00126	-.15435	.22463
1575	2.000	-.004	.31677	.75637	-.00604	.01000	-.00305	.80009	.34520

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SID 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT.. USE EDPM PROGRAMS 2K176+1991 JOB NO. (3509-14)

SAL NO. 199

TEST NO. RUN LOG THETA= 20, CONFIGURATION.(13) RUN NO. 39

MACH NO.	RELT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CRM.BODY	CRM.BODY	CD	(X CP/D)	
1201	39.298	10.024	•13738	.83430	-•08953	.00971	-•00093	-•21345	•16467	
1575	2.000	-•003	•28047	•79766	-•00575	.00940	-•00261	.83430	•38080	
0	•299	10.023	•13515	•82730	-•08781	.00964	-•00087	-•21345	•16337	
0	2.000	-•003	•27705	•79117	-•00568	.00934	-•00253	.82730	•38306	
0	300	15.192	•14996	.81060	-•06229	.01144	-•00046	-•14727	•18500	
A-52	0	2.000	-•002	•35710	•74300	-•00731	.01092	-•00344	.81060	•52556
0	301	20.387	•17454	•87447	-•03438	.01072	-•00143	-•18981	•19959	
0	2.000	-•015	•46818	.75892	-•01361	.00955	-•00508	.87447	•62657	
0	3.000	-•043	•60466	•84778	-•02994	.01558	-•00891	1.02572	•66100	
SID	0	•302	25.574	•17955	1.02572	-•02358	.01790	-•00132	-•30483	•17504
62-343	0	•303	30.828	•22832	1.09132	-•01006	.01963	-•00089	-•33477	•20922
0	2.000	-•053	•75523	.82020	-•03497	.01640	-•01083	1.09132	•68668	

1201	39.298	10.024	•13738	.83430	-•08953	.00971	-•00093	-•21345	•16467	
1575	2.000	-•003	•28047	•79766	-•00575	.00940	-•00261	.83430	•38080	
0	•299	10.023	•13515	•82730	-•08781	.00964	-•00087	-•21345	•16337	
0	2.000	-•003	•27705	•79117	-•00568	.00934	-•00253	.82730	•38306	
0	300	15.192	•14996	.81060	-•06229	.01144	-•00046	-•14727	•18500	
A-52	0	2.000	-•002	•35710	•74300	-•00731	.01092	-•00344	.81060	•52556
0	301	20.387	•17454	•87447	-•03438	.01072	-•00143	-•18981	•19959	
0	2.000	-•015	•46818	.75892	-•01361	.00955	-•00508	.87447	•62657	
0	3.000	-•043	•60466	•84778	-•02994	.01558	-•00891	1.02572	•66100	
SID	0	•302	25.574	•17955	1.02572	-•02358	.01790	-•00132	-•30483	•17504
62-343	0	•303	30.828	•22832	1.09132	-•01006	.01963	-•00089	-•33477	•20922
0	2.000	-•053	•75523	.82020	-•03497	.01640	-•01083	1.09132	•68668	

CONFIDENTIAL

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.13509-14)

SAL NO. 199

THETA= 20, CONFIGURATION..(12)

RUN NO. 40

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM	STAB	CRM	STAB	(DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CRM.BODY	CRM.BODY	CD	(X CP/D)		
1201	40.304	20.322	.17704	.88379	-.09235	.01087	-.00131	-.17411	.20031		
1575	2.000	-.011	.47289	.76733	-.01226	.00974	-.00500	.88379	.50472		
0	.305	15.187	.17878	.80475	-.10354	.01073	-.00032	-.13709	.222216		
0	2.000	-.005	.38331	.72983	-.00563	.01028	-.00312	.80475	.42988		
0	.306	10.034	.16377	.79771	-.11784	.00986	-.00087	-.17805	.20529		
A-53	0	2.000	-.005	.30023	.75698	-.00516	.00955	-.00257	.79771	.30751	
0	.307	25.446	.15212	1.02834	-.09371	.01420	-.00153	-.29857	.14793		
0	3.000	-.032	.57912	.86327	-.02294	.01217	-.00749	1.02834	.53819		
0	.308	30.653	.17905	1.08895	-.09017	.01626	-.00042	-.32614	.16442		
0	3.000	-.034	.70913	.84558	-.02511	.01377	-.00865	1.08895	.57285		

SHD 62-343

NAA SISD SUPPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NG. 199 THETA= 20, CONFIGURATION..(14) RUN NO. 41

TEST NG.	RUN#	LOG	ALPHA	C	CL	CX	CPM	CYH. STAB	CRM. STAB	(DP/Q)B	(L/D)
MACH NG.	REIT	YAW	C	(CN) BDDY	(CA) BDDY	(CY) BDDY	CYN. BDDY	CRM. BDDY	CD	(X CP/)	
1201	41.309	20.316	.17266	.88843	-.09235	.01412	.00139	-.18435	.19434		
1575	2.000	-.018	.47032	.77325	-.00316	.01372	-.00360	.88843	.50364		
0	.310	15.188	.18267	.81170	-.10797	.01190	.00026	-.13787	.22504		
0	2.000	-.012	.38890	.73551	-.00373	.01155	-.00286	.81170	.42237		
0	•311	10.030	.16271	.79443	-.12064	.01062	-.00051	-.18592	.20482		
A-54	0	2.000	-.010	.29856	.75396	-.00379	.01037	-.00235	.79443	.29592	
0	•312	10.028	.16473	.81128	-.12291	.01058	-.00040	-.18986	.20305		
0	2.000	-.010	.30346	.77021	-.00389	.01035	-.00224	.81128	.29498		
0	•313	25.438	.14562	1.03226	-.09296	.01684	.00237	-.30408	.14107		
0	2.000	-.015	.57482	.86969	-.00666	.01623	-.00509	1.03226	.53828		
0	•314	30.641	.17305	1.07804	-.08807	.01680	.00343	-.32850	.16053		
0	2.000	-.015	.69824	.83939	-.00671	.01620	-.00561	1.07804	.57387		

SID 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

TEST NO.

RUN NO.

RUN NO. 42

THETA= 0, CONFIGURATION.(13)

MACH NO.	RELT	YAW C	(CN) BODY	(CA) BODY	CX	CPM	CYM. STAB	CRM. STAB (DP/Q)B	(P/D)
1201	42.315	- .006	.00513	.89068	- .01149	.00667	.00058	- .34406	.00576
1575	2.000	- .001	.00504	.89069	- .00439	.00667	.00058	.89068	- 1.57876
0	.316	- 1.037	- .00457	.88258	- .00409	.00765	.00049	- .34406	- .00518
0	2.000	- .002	- .02054	.88235	- .00620	.00764	.00063	.88258	.89890
0	.317	- 2.073	- .02060	.87047	.00685	.00892	.00048	- .34249	- .02367
0	2.000	- .006	- .05208	.86915	- .00857	.00890	.00080	.87047	.56841
0	.318	- 3.113	- .04009	.87198	.01994	.00970	.00049	- .34170	- .04598
0	2.000	- .007	- .08738	.86852	- .00974	.00966	.00102	.87198	.47178
0	.319	- 5.188	- .07433	.87902	.04404	.01049	.00013	- .34485	- .08456
0	2.000	- .009	- .15350	.86870	- .01086	.01044	.00108	.87902	.41307
0	.320	- 10.350	- .10475	.94739	.06570	.00976	- .00049	- .34249	- .11056
0	2.000	- .007	- .27322	.91316	- .00970	.00969	.00127	.94739	.45953
0	.321	1.027	.01605	.87918	- .01928	.00816	.00082	- .34564	.01825
0	2.000	- .003	.03180	.87875	- .00714	.00817	.00068	.87918	.09374

A-55

SID 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(13)

RUN NO. 42

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	DP/Q1B	L/D	
MACH NO.	RELL	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CD	(X) CP/D	
1201	42.322	2.063	.03229	.87489	-.03084	.01025	.00099	-.34327	.03690	
1575	2.000	-.009	.06376	.87316	-.01069	.01027	.00062	.87489	.21627	
0	.323	3.101	.04992	.87104	-.04340	.01151	.00117	-.33933	.05731	
0	2.000	-.013	.09695	.86706	-.01326	.01156	.00054	.87104	.25239	
0	.324	5.176	.08442	.88152	-.06772	.01159	.00147	-.34091	.09576	
A-56	0	2.000	-.015	.16359	.87031	-.01407	.01167	.00042	.88152	.28603
0	.325	7.246	.11005	.90678	-.08830	.01139	.00209	-.34406	.12137	
0	2.000	-.017	.22353	.88566	-.01488	.01157	.00064	.90678	.30497	
0	.326	10.340	.11430	.97173	-.09328	.01690	.00343	-.34946	.11763	
0	2.000	-.007	.28683	.93545	-.01510	.01724	.00034	.97173	.37479	
0	.327	-.006	.00540	.88535	-.01209	.00706	.00057	-.34630	.00610	
0	2.000	-0	.00530	.88536	-.00511	.00706	.00057	.88535	.1.58007	
0	.328	-10.192	-.12736	.94627	.22368	.01038	-.00057	-.33921	-.13459	
0	2.000	-.005	-.29275	.90881	-.00916	.01032	.00128	.94627	-.0640	

SID 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN.LOG C CONFIGURATION.(12)

RUN NO. 43

MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	CX	CL	CPM	CYM	STAB	CRM-STAB (DP/Q)B	(L/D)
1201	43.329	- .005	.00507	.80951	-.01083	.01306	.00068	-.32654	.00626		
1575	2.000	- .013	.00500	.80951	-.01461	.01306	.00068	.80951	-1.46632		

	0	.330	-1.049	-.02381	.81861	.00987	.01278	.00049	-.32812	-.02909	
	0	2.000	- .014	-.03879	.81803	-.01460	.01277	.00072	.81861	.44566	
	0	.331	-2.092	-.05059	.83332	.02930	.01230	.00042	-.33443	-.06070	
A-57	0	2.000	- .014	-.08096	.83092	-.01417	.01227	.00087	.83332	.33813	
	0	.332	-3.131	-.07288	.85392	.04673	.01159	.00047	-.34153	-.08535	
	0	2.000	- .011	-.11941	.84866	-.01259	.01155	.00111	.85392	.30863	
	0	.333	-5.201	-.10497	.89161	.07484	.01216	.00009	-.35021	-.11773	
SID	0	2.000	- .011	-.18534	.87843	-.01287	.01210	.00119	.89161	.29621	
	0	.334	-10.346	-.12626	.95382	.09757	.00976	-.00041	-.32970	-.13237	
	0	2.000	- .005	-.29548	.91564	-.00905	.00968	.00135	.95382	.36978	
	0	.335	1.041	.03605	.81537	-.03242	.01269	.00089	-.32418	.04421	
	0	2.000	- .013	.05085	.81458	-.01424	.01270	.00066	.81537	.06297	

62-343

NAA SISD SUPERSONIC AERG LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199 THETA= 0, CONFIGURATION..(12)

RUN NO. 43

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYN. STAB	CRM. STAB	DP/Q) B (L/D)
MACH NO.	RELT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CRM. BODY	CRM. BODY	CD (X CP/D)

1201	43.336	2.084	.06291	.83465	-.05249	.01419	.00107	-.33207 .07537
1575	2.000	-.017	.09321	.83181	-.01696	.01422	.00055	.83465 .13682
0	.337	3.123	.08487	.85633	-.06997	.01443	.00131	-.33680 .09911
0	2.000	-.018	.13139	.85044	-.01742	.01448	.00053	.85633 .16745
0	.338	5.194	.11852	.89769	-.10008	.01450	.00173	-.34232 .13203
0	2.000	-.019	.19929	.88328	-.01786	.01460	.00041	.89769 .19781
0	.339	7.255	.13395	.93801	-.11730	.01324	.00233	-.35100 .14280
0	2.000	-.016	.25131	.91359	-.01588	.01343	.00063	.93801 .23324
0	.340	10.341	.13747	.97870	-.12430	.01182	.00276	-.34627 .14046
62-343	0	2.000	-.016	.31088	.93813	-.01485	.01213	.00059 .97870 .30015

CONFIDENTIAL

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. USE EDPM PROGRAMS 2K176+1991 JOB NO. (3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(14)

RUN NO. 44

TEST NO.	RUN LOG	ALPHA C	CX	CPM	CY	CZ	CRM. STAB	IDP/QIB (L/D)
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CL	CY.M.BODY	CD X CP/D
1201	44.341	-0.018	.00441	.80980	-0.02062	.01356	.00075	-0.32805 .00544
1575	2.000	-0.020	.00415	.80980	-0.01749	.01356	.00075	.80980 -4.26683

0	0	.342	-1.066	-0.02819	.81801	.00200	.01381	.00048 -.33199 -.03446
0	0	2.000	-0.021	-0.04339	.81734	-0.01793	.01380	.00074 .81801 .65395
0	0	.343	-2.113	-0.05956	.82808	.02329	.01315	.00038 -.33673 -.07193
A-59	0	2.000	-0.016	-0.09005	.82532	-0.01559	.01312	.00087 .82808 .44140
0	0	.344	-3.151	-0.07877	.84576	.03734	.01165	.00041 -.34304 -.09313
0	0	2.000	-0.012	-0.12513	.84015	-0.01320	.01161	.00105 .84576 .40161
0	0	.345	-5.220	-0.10637	.89010	.06117	.01173	.00003 -.35093 -.11951
SID 62-343	0	2.000	-0.012	-0.18689	.87673	-0.01308	.01168	.00109 .89010 .37270
0	0	.346	-10.382	-0.13164	.95423	.07556	.00903	-.00034 -.33120 -.13796
0	0	2.000	-0.006	-0.30142	.91490	-0.00871	.00895	.00130 .95423 .44930
0	0	.347	1.027	.03630	.81081	-0.04396	.01353	.00086 -.32884 .04477
0	0	2.000	-0.020	.05083	.81002	-0.01772	.01354	.00062 .81081 -.16483

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

RUN NO. 44

THETA= 0,

CONFIGURATION.. (14)

SAL NO. 199

TEST NO. RUN LOG ALPHA C CL CX CPN CYM STAB (DP/Q)B (L/D)

MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CRM BODY CO (X CP/D)

1201	44.348	2.075	.06607	.82530	-.06362	.01397	.00103	-.33199	.08005	
1575	2.000	-.019	.09589	.82237	-.01748	.01400	.00052	.82530	.03651	
0	•349	3.114	•08771	•84751	-.08016	•01415	•00127	-.33988	.10349	
0	2.000	-.020	.13361	•84149	-.01808	•01419	•00050	•84751	.10005	
0	•350	5.186	•11894	•89161	-.10627	•01286	•00155	-.34462	.13340	
A-60	0	2.000	-.019	.19903	•87722	-.01688	•01295	•00039	•89161	.16608
0	•351	7.248	•13338	•93182	-.12098	•01153	•00210	-.35251	.14314	
0	3.000	-.020	•24986	•90755	-.01624	•01171	•00062	•93182	.21581	
0	•352	10.335	•13707	•97394	-.12737	•01127	•00268	-.34856	.14073	
0	2.000	-.017	•30954	•93356	-.01489	•01157	•00062	•97394	.28851	

SID 62-343

CONFIDENTIAL

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199 THETA= 0, CONFIGURATION..(14) RUN NO. 45

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPH	CYM-STAB	CRM-STAB	(DP/Q)B	(L/D)	
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM-BODY	CRM-BODY	CD	(X CP/D)	
1201	45.353	-0.008	0.01179	0.65532	-0.03550	0.00978	0.00115	-0.08003	.01799	
3270	3.000	-0.007	0.01170	0.65532	-0.01552	0.00978	0.00115	.65532	-2.33405	
0	354	-0.008	0.01121	0.65439	-0.03534	0.00850	0.00156	-0.08737	.01713	
0	3.000	-0.007	0.01112	0.65440	-0.01399	0.00850	0.00157	.65439	-2.47855	
0	355	-1.024	-0.02058	0.65068	-0.01950	0.00732	0.00158	-0.09716	-0.03163	
A-61	0	3.000	-0.005	-0.03220	0.65021	-0.01061	0.00729	0.00171	.65068	1.30540
0	356	-2.039	-0.05157	0.64921	-0.00395	0.00729	0.00110	-0.09716	-0.07943	
0	2.000	-0.004	-0.07463	0.64696	-0.00965	0.00725	0.00136	.64921	.75294	
0	357	-3.054	-0.08103	0.65261	-0.01195	0.00742	0.00122	-0.09642	-0.12416	
0	2.000	-0.004	-0.11567	0.64737	-0.00966	0.00734	0.00161	.65261	.59671	
0	359	-5.078	-0.12361	0.66266	-0.03439	0.00616	0.00107	-0.09471	-0.18654	
0	2.000	-0.003	-0.18177	0.64912	-0.00786	0.00605	0.00161	.66266	.51078	
0	360	-10.140	-0.22383	0.71629	-0.08996	0.00507	0.00100	-0.09398	-0.31248	
0	2.000	-0.001	-0.34641	0.66571	-0.00507	0.0482	0.00188	.71629	.44031	

SD 62-343

NAA SISD SUPersonic AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NG. 199

THETA= 0. CONFIGURATION..(14)

RUN NO. 45

TEST NO. RUN LOG ALPHA C CL CX CPM CRM STAB (DP/Q)B (L/D)
MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CRM BODY CD X CP/D

1201	45.361	1.009	.04560	.65457	-.05258	.00795	.00144	-.09545	.06966	
3270	3.000	-.005	.05711	.65367	-.01172	.00798	.00130	.65457	-.22065	
0	3.62	2.023	.07606	.65397	-.06974	.00814	.00150	-.09471	.11631	
0	3.000	-.005	.09910	.65087	-.01220	.00819	.00121	.65397	-.00371	
0	3.63	3.035	.09852	.66326	-.08318	.00952	.00157	-.09373	.14855	
A-62	0	3.000	-.007	.13350	.65711	-.01506	.00959	.00107	.66326	.07690
0	3.64	5.057	.13035	.68086	-.10109	.00805	.00189	-.09471	.19145	
0	2.000	-.007	.18984	.66672	-.01470	.00819	.00117	.68086	.16749	
STD 62-343	0	.365	7.080	.16584	.69853	-.12091	.00999	.00226	-.09226	.23741
0	3.000	-.008	.25065	.67277	-.01658	.01019	.00101	.69853	.21763	
0	3.66	10.118	.22815	.73072	-.15586	.00911	.00275	-.09471	.31222	
0	3.000	-.008	.35294	.67929	-.01588	.00945	.00110	.73072	.25840	
0	3.67	-.008	.01245	.65650	-.03630	.00920	.00131	-.09716	.01897	
0	3.000	-.006	.01237	.65650	-.01410	.00920	.00131	.65650	-2.23598	

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199 THETA= 0 , CONFIGURATION..(13) RUN NO. 46

TEST NO.	RUN.LOC	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B	(L/D)
MACH NO.	RELT	YAW C	(CN)BODY	(CA)BODY		CYM.BODY	CRM.BODY	CD	(X CP/D)

1201	46.368	- .003	.00399	.69690	- .01421	.00948	.00110	- .09129	.00573	
3270	2.000	- .005	.00395	.69690	- .01297	.00948	.00110	.69690	- 2.89725	
0	.369	- 1.018	- .02128	.69745	- .00129	.00784	.00112	- .09251	- .03051	
0	2.000	- .004	- .03366	.69696	- .01009	.00782	.00126	.69745	.73836	
0	.370	- 2.031	- .04490	.69701	.01156	.00801	.00088	- .09007	- .06442	
A-63	0	2.000	- .003	- .06957	.69498	- .00969	.00797	.00117	.69701	.53383
0	.371	- 3.044	- .06834	.69612	.02459	.00762	.00109	- .09251	- .09818	
0	2.000	- .003	- 1.0520	.69151	- .00922	.00755	.00149	.69612	.46625	
0	.372	- 5.066	- .10025	.70130	.04164	.00710	.00095	- .09251	- .14295	
SID 62-343	0	2.000	- .003	- 16177	.68971	- .00804	.00699	.00157	.70130	.44260
0	.373	- 10.129	- 1.9934	.74538	.09546	.00774	.00036	- .09324	- .26744	
0	2.000	- 0	- 32729	.69872	- .00540	.00756	.00172	.74538	.40832	
0	.374	1.010	.02768	.69646	- .02595	.00907	.00134	- .09251	.03974	
0	2.000	- .005	.03995	.69586	- .01197	.00909	.00118	.69646	.05046	

NAA SISD SUPPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO. (3509-14)

SAL NO. 199

THETA= 0 , CONFIGURATION.. (13)

RUN NO. 46

TEST NO. RUN LOG ALPHA G CL CX CPM CYM. STAB CRM. STAB (DP/Q)B (L/D)

MACH NO. REII YAW C (CN)BODY (CA)BODY CRM.BODY CO IX CP/D)

1201	46.375	2.024	0.05327	.69658	-.03929	.00907	.00150	-.09080	.07548
3270	2.000	-.005	0.07784	.69426	-.01239	.00911	.00118	.69658	.19530
0	.376	3.038	.07810	.69659	-.05282	.00955	.00168	-.09129	.11212
0	3.000	-.005	.11490	.69147	-.01330	.00962	.00118	.69659	.24030
0	.377	5.062	.11746	.70251	-.07410	.00963	.00204	-.09007	.16720
A-64	0	3.000	-.006	.17898	.68941	-.01403	.00978	.00118	.70251
									.28599
0	.378	7.088	.15998	.71347	-.09574	.01038	.00265	-.09129	.22422
0	3.000	-.007	.24677	.68828	-.01579	.01062	.00135	.71347	.31204
SD	0	.379	10.129	.22841	.75057	-.13403	.00997	.00276	-.09324
SD	0	3.000	-.008	.35683	.69871	-.01662	.01030	.00096	.75057
									.32437

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NAA SISO SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN.LG ALPHA C CL CX CPM CYM STAB CRM. STAB (DP/Q)B (L/D)

RUN NO. 47

THETA= 0, CONFIGURATION.(12)

MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CRM. BODY CRM. BODY CD (X CP/D)

1201	47.380	- .004	.00149	.666701	- .01206	.00899	.00155	- .09254	.00223	
3270	4.000	- .004	.00144	.66702	- .01176	.00899	.00155	.66701	-7.67421	
0	.381	-1.021	- .03709	.65434	.00895	.00836	.00129	- .09497	- .05668	
0	2.000	- .003	- .04874	.65357	- .00967	.00834	.00144	.65434	.51645	
0	.382	-2.034	- .06003	.64159	.02070	.00789	.00123	- .09376	- .09357	
A-65	0	2.000	- .003	- .08276	.63905	- .00957	.00784	.00151	.64159	.44987
0	.383	-3.047	- .08953	.63644	.03878	.00813	.00115	- .09497	- .14067	
0	2.000	- .003	- .12323	.63078	- .00954	.00806	.00158	.63644	.38529	
0	.384	-5.072	- .13555	.65723	.06778	.00751	.00101	- .09327	- .20625	
0	2.000	- .003	- .19311	.64268	- .00832	.00739	.00167	.65723	.34904	
0	.385	-10.127	- .21912	.72276	.12058	.00636	.00076	- .09254	- .30317	
0	2.000	- .001	- .34277	.67299	- .00535	.00613	.00186	.72276	.34820	
0	.386	1.014	.04296	.65477	- .03433	.01210	.00135	- .09424	.06561	
0	3.000	- .007	.05455	.65391	- .01714	.01213	.00113	.65477	.07069	

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN LOG ALPHA C CL CX CPM CYM. STAB CRM. STAB (DP/Q)B (L/D) RUN NO. 47

MACH NO.	RELT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY	CD	(X CP/D)	
1201	47.387	2.028	.06725	.64397	-.04629	.c1102	.00142	-.09497	.10443	
3270	2.000	-.006	.08999	.64119	-.01506	.01106	.00103	.64397	.18558	
0	.388	3.042	.09681	.63367	-.06334	.01117	.00160	-.09376	.15278	
0.	2.000	-.006	.13029	.62764	-.01544	.01124	.00101	.63367	.21382	
0	.389	5.067	.14711	.65462	-.09497	.01120	.00194	-.09108	.22472	
A-66	0	3.000	-.007	.20433	.63907	-.01591	.01133	.00094	.65462	.23524
0	.390	7.089	.18260	.68359	-.11661	.01143	.00240	-.09254	.26711	
0	3.000	-.007	.26555	.65583	-.01676	.01164	.00097	.68359	.26087	
0	.391	10.126	.24228	.72698	-.15372	.c1108	.00315	-.09327	.33327	

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NG. 199

TEST NG. RUN LOG ALPHA C CL CX CPM CYM STAB (DP/Q)B (L/D)

MACH NG. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CRM BODY CRM BODY CO IX CP/D)

RUN NO. 48

THETA= 20, CONFIGURATION..(13)

	1201	48.394	20.160	.35195	.94066	-.17704	.01368	-.00028	-.08771	.37415
3270	3.000	-.002	.65452	.76179	-.01255	.01274	-.00497	.94066	.42951	
0	.395	15.100	.31057	.84898	-.17046	.01220	-.00087	-.08771	.36582	
0	2.000	-.001	.52097	.73879	-.01047	.01156	-.00402	.84898	.37280	
0	.397	10.043	.23860	.73602	-.13779	.00892	-.00057	-.08771	.32417	
A-67	0	2.000	-.001	.36327	.68315	-.00552	.00868	-.00211	.73602	.32069
0	.398	25.218	.35855	1.05400	-.16437	.01543	.00094	-.08892	.34018	
0	3.000	-.003	.77337	.80085	-.01453	.01436	-.00572	1.05400	.48746	
S	0	.399	30.272	.34218	1.12617	-.13639	.01722	.00181	-.09257	.30384
62-343	0	2.000	-.004	.86315	.80020	-.01742	.01578	-.00711	1.12617	.54199

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NAA SISD SUPERSIGNIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPH PROGRAMS 2K176+1991 JOB NO. (3509-14)

SAL NO. 199

THETA= 20, CONFIGURATION..(12)

RUN NO. 49

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM-STAB	CRM-STAB (DP/Q1B (L/D))
MACH NO.	RELT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM.BODY	CRM.BODY CD (X CP/D)

1201	49.400	20.144	.34241	.95283	-.20683	.01430	-.00076	-.08845	.35936		
3270	3.000	-.004	.64955	.77667	-.01483	.01316	-.00564	.95283	.38158		
0	402	15.090	.31002	.83106	-.19395	.01175	-.00082	-.08456	.37305		
0	2.000	-.001	.51566	.72171	-.00934	.01114	-.00385	.83106	.32388		
0	403	10.042	.25013	.71383	-.15498	.00826	-.00051	-.08529	.35040		
A-68	0	2.000	-.001	.37075	.65929	-.00412	.00804	-.00194	.71383	.28199	
0	404	25.196	.34070	1.05934	-.19866	.01596	.00127	-.08699	.32161		
0	2.000	-.002	.75919	.01357	-.01346	.01498	-.00564	1.05934	.43833		
SID	0	405	30.240	.30725	1.13791	-.18035	.01647	.00146	-.09258	.27001	
	62-343	0	2.000	-.004	.83843	.82842	-.01701	.01496	-.00703	1.13791	.48489

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199 RUN NO. 50

TEST NO. THETA= 20, CONFIGURATION..(14)

MACH NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B (L/D)	CD (X CP/D)
	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CD	(X CP/D)
1201	50.406	20.141	.34048	.93437	-.20961	.01782	.00114	-.08943	.36440
3270	2.000	-.002	.64134	.76003	-.01049	.01713	-.00506	.93437	.37317
0	.407	15.085	.29900	.81977	-.19401	.01493	.00052	-.08457	.36474
0	2.000	-.003	.50200	.71373	-.00677	.01455	-.00338	.81977	.31353
0	.408	10.034	.23587	.71795	-.15761	.01304	.00030	-.08457	.32853
0	2.000	-.005	.35733	.66588	-.00356	.01289	-.00198	.71795	.25891
0	.410	25.195	.35065	1.04240	-.20976	.01888	.00241	-.09137	.33638
0	2.000	-.001	.76097	.79402	-.01281	.01811	-.00585	1.04240	.42435
0	.411	30.244	.31699	1.12315	-.17639	.01936	.00354	-.09307	.28223
0	2.000	-0	.83948	.81069	-.01408	.01850	-.00669	1.12315	.48988

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN LOG THETA= 20, CONFIGURATION..(3)

RUN NO. 51

MACH NO.	RELT	YAW C	(CN)BODY	(CA)BODY	CX	CPM	CYM	CRM-STAB	(DP/Q)B (L/D)	(X CP/D)
1201	51.413	20.182	.36590	.97900	-.14469	.01100	-.00137	-.08775	.37374	
3270	2.000	-.004	.68113	.79271	-.01282	.00985	-.00508	.97900	.48757	
0	.414	15.110	.30174	.85081	-.13405	.00823	-.00115	-.08702	.35465	
0	3.000	-.002	.51305	.74277	-.00821	.00765	-.00326	.85081	.43872	
0	.415	10.042	.21188	.74724	-.10491	.00781	-.00051	-.08944	.28355	
0	2.000	-0	.33890	.69886	-.00517	.00761	-.00187	.74724	.39043	
0	.417	25.248	.37745	1.08201	-.11771	.01290	-.00085	-.08775	.34884	
0	2.000	-.006	.80284	.81772	-.01621	.01130	-.00627	1.08201	.55338	
0	.418	30.307	.35169	1.16058	-.07162	.01316	-.00003	-.09576	.30303	
0	2.000	-.006	.88921	.82458	-.01663	.01138	-.00661	1.16058	.61945	

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO.	199	CONFIGURATION..(1)						RUN NO.	52
TEST NO.	RUN.LOG	ALPHA C	CL	CX	CPM	CYM-STAB	CRM-STAB (DP/Q)B (L/D)		
MACH NO.	RELT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY	CD	(X CP/D)
1201	52.419	20.165	.35757	.97940	-.17672	.C1078	-.00154	-.09212	.36509
3270	2.000	-.004	.67322	.79615	-.01310	.00959	-.00516	.97940	.43750
0	.420	15.102	.30270	.83656	-.15611	.C0861	-.00054	-.08653	.36184
0	2.000	-.001	.51016	.72883	-.00540	.00817	-.00276	.83656	.39400
0	.421	10.044	.23463	.72453	-.13018	.00712	-.00016	-.08362	.32383
0	2.000	-.002	.35737	.67252	-.00298	.00698	-.00140	.72453	.33571
0	.422	25.225	.36203	1.10007	-.16145	.01445	.00036	-.09066	.32909
0	2.000	-.003	.79626	.84094	-.01398	.C1323	-.00583	1.10007	.49724
0	.423	30.273	.31743	1.18054	-.12391	.01491	.00104	-.09430	.26888
0	2.000	-.004	.86919	.85961	-.01609	.01340	-.00662	1.18054	.55744

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT... (USE EDPM PROGRAMS 2K176+199) JUB NO.(3509-14)

SAL NO.	199	THETA= 20, CONFIGURATION..(5)										RUN NO. 53
TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B	(L/D)			
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY					(X CP/D)		
1201	53.424	20.162	.35761	.96716	-.18215	.01428	.00052	-.08944	.36976			
3270	2.000	-.001	.66901	.78468	-.00924	.01359	-.00443	.96716	.42773			
0	.425	15.096	.29402	.82682	-.15991	.c1203	.00027	-.08531	.35560			
0	2.000	-.003	.49917	.72174	-.00559	.01168	-.00287	.82682	.37964			
0	.426	10.035	.22254	.72633	-.13634	.00907	.00006	-.08459	.30639			
0	2.000	-.003	.34568	.67645	-.00303	.c0894	-.00152	.72633	.30558			
0	.427	25.225	.36722	1.08472	-.16404	.c1262	.00083	-.08774	.33854			
0	3.000	-.003	.79442	.82484	-.01231	.c1177	-.00462	1.08472	.49351			
0	.429	30.276	.32336	1.16716	-.11990	.01535	.00127	-.09017	.27705			
0	2.000	-.004	.86761	.84504	-.01608	.01389	-.00664	1.16716	.56180			

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. USE EDPM PROGRAMS 2K176+1991 JOB NG.(3509-14)

SAL NO. 199 THETA= 0. CONFIGURATION• (5) RUN NG. 54

TEST NO.	RUN. LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB (DP/Q)B (L/D)	CRM. BODY	CY(M. BODY	CRM. BODY	CY(M. BODY	CD	(X CP/D)
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY								

1201	54.430	-0.009	0.00958	.63486	-.03657	.01367	.00143	-.09867	.01508
3270	2.000	-0.008	0.00947	.63486	-.01887	.01367	.00144	.63486	-3.16131

0	431	-1.028	-0.03020	.62831	-.01833	.01357	.00082	-.09503	-.04807
0	2.000	-0.005	-0.04147	.62767	-.01509	.01356	.00106	.62831	1.14214
0	432	-2.044	-0.06349	.62946	-.00217	.01185	.00104	-.09260	-.10087
0	2.000	-0.003	-0.08590	.62679	-.01167	.01181	.00146	.62946	.72525
0	433	-3.060	-0.09586	.63673	-.01348	.01303	.00109	-.09381	-.15055
0	2.000	-0.001	-0.12971	.63071	-.00874	.00996	.00163	.63673	.59607
0	434	-5.090	-0.14384	.64785	-.02970	.00212	.00128	-.09430	-.222203
0	2.000	.003	-0.20074	.63254	-.00200	.00200	.00146	.64785	.55205

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0	435	-7.116	-0.19033	.66070	.05551	.00512	.00104	-.09139	-.28808
0	2.000	-0.002	-0.27069	.63204	-.00565	.00495	.00166	.66070	.49494
0	436	-10.146	-0.20769	.73383	.06036	.00628	.00063	-.09260	-.28302
0	2.000	-0.002	-0.33368	.68578	-.00679	.00607	.00173	.73383	.51911

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SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. (USE EDPM PROGRAMS 2K176+199) JGB NO. (3509-14)

SAL Nro 199 THEIA= 0. CONFIGURACION::(5) RUN NO 54

As a result, the number of people who have been infected with the virus has increased rapidly, and the disease has spread to many countries around the world.

REIT YAM C (CN) BODY (CA) BODY (CY) BODY CYM. BODY CRM. BODY CD (X) CP/D

1201 54.437 1.010 .05169 .63757 -.05697 .00801 .00153 -.00803 .00139 .63757 -.20546

0	439	3.041	.11441	.65382	-.09005	.00756	.00148	-.09430	.17499
0	2.000	-0.008	.14893	.64683	-.01531	.00763	.00108	.65382	.09531

0	0.440	5.066	• 15694	• 66811	-• 11017	• 00614	• 00166	-• 09745	• 23445
0	2.000	-0.010	• 21502	• 65167	-• 01684	• 00626	• 00111	• 66811	• 18760

0	•441	7.087	.18172	•69519	-.12338	•00632	•00202	-.09576	•26139
0	2.000	-.011	•26609	•66747	-.01757	•00652	•00122	•69519	•23632

0	.442	10.121	.21544	.73871	-.13519	.00588	.00225	-.09503	.29164
0	2.000	-.012	.34188	.68937	-.01857	.00618	.00118	.73871	.30456

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT••(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO.	199	TEST NO.	RUN.LOG	ALPHA C	CL	CX	CPM	CYM-STAB	CRM-STAB (DP/Q)B	CD	(X CP/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY						
1201	55.443	-0.004	0.00412	.70015	-0.01512	0.00652	0.00144	-0.09745	0.00589		
3270	3.000	-0.004	0.00407	.70015	-0.00993	0.00652	0.00144	.70015	-3.01005		
0	444	-1.017	-0.01512	.69915	-0.00686	0.00601	0.00108	-0.09672	-0.02162		
0	3.000	-0.004	-0.02752	.69877	-0.00904	0.00599	0.00119	0.69915	0.94919		
0	445	-2.035	-0.05384	.69640	.01204	0.00636	0.00128	-0.09745	-0.07731		
0	3.000	-0.004	-0.07853	.69405	-0.00892	0.00631	0.00151	0.69540	0.54668		
0	447	-3.046	-0.06660	.69154	.01739	0.00543	0.00121	-0.09648	-0.09631		
0	3.000	-0.003	-0.10325	.68703	-0.00758	0.00535	0.00150	0.69154	0.53159		
0	448	-5.076	-0.12533	.68788	.04567	0.00608	0.00111	-0.09672	-0.18220		
0	2.000	-0.003	-0.18570	.67409	-0.00797	0.00596	0.00164	0.68788	0.45405		
0	449	-10.133	-0.18274	.75921	.06601	0.00560	0.00080	-0.09745	-0.24070		
0	2.000	-0.002	-0.31344	.71523	-0.00672	0.00538	0.00178	0.75921	0.48938		
0	450	1.009	0.2380	.70085	-0.02301	0.00722	0.00132	-0.09624	0.03396		
0	3.000	-0.005	0.3614	.70032	-0.01083	0.00724	0.00119	0.70085	0.06322		

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NAA SISD SUPersonic AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991) JOB NO.(3509-14)

SAL NO. 199

RUN LOG RUN NO. 0. CONFIGURATION..(3)

TEST NO. ALPHA C CL CX CPM CYM-STAB CRM-STAB (DP/Q)B (L/D)

MACH NO. REII YAW C (CN)BODY (CA)BODY (CY)BODY CRM.BODY CRM.BODY CD (X CP/D)

1201	55.451	2.023	.04671	.69752	-.03313	.00731	.00145	-.09745	.06697	
3270	3.000	-.005	.07131	.69544	-.01166	.00735	.00119	.69752	.23544	
0	452	3.038	.07389	.69308	-.04624	.00800	.00170	-.09551	.10661	
0	3.000	-.006	.11051	.68819	-.01304	.00807	.00127	.69308	.28155	
0	453	5.069	.13365	.68763	-.07596	.00935	.00193	-.09551	.19436	
A-76	0	2.000	-.008	.19387	.67313	-.01628	.00948	.00110	.68763	.30820
0	454	7.098	.18354	.70067	-.09841	.00968	.00248	-.09575	.26194	
0	3.000	-.008	.26869	.67262	-.01673	.00991	.00126	.70067	.33375	
0	455	10.130	.20533	.76001	-.10382	.00822	.00272	-.09672	.27017	
0	2.000	-.008	.33578	.71206	-.01540	.00857	.00124	.76001	.39080	

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NAA SISD SUPersonic AERo LABORATORY TEST DATA PRINTOUT • USE EDPM PROGRAMS 2K176+1991 JGB NO. (3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION•(1)

RUN NO. 56

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB (DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CO (X CP/D)
1201	56.456	-0.004	0.00248	.65259	-.01313	.01228	.00116	-.10109 .00380
3270	2.000	-0.010	0.00244	.65259	-.02015	.01228	.00116	.65259 -4.68221
0	457	-1.023	-0.04217	.62588	.01032	.00865	.00111	-.09866 -.06737
0	3.000	-0.006	-0.05333	.62502	-.01349	.00863	.00127	.62588 .50653
0	458	-2.038	-0.07141	.60887	.02470	.00637	.00125	-.09745 -.11728
0	3.000	-0.004	-0.09301	.60594	-.00948	.00632	.00148	.60887 .43446
0	459	-3.053	-0.10686	.61110	.04404	.00717	.00110	-.09502 -.17486
0	3.000	-0.004	-0.13925	.60454	-.01040	.00710	.00148	.61110 .38372
0	460	-4.952	.27738	.61332	-.16851	.00900	.00066	-.09502 .45227
0	3.000	-0.005	.22342	.63497	-.01253	.00891	.00143	.61332 -.05424
0	461	-10.136	-.21035	.74016	.09019	.00657	.00060	-.09332 -.28420
0	2.000	-0.003	-.33730	.69160	-.00822	.00636	.00175	.74016 .43263
0	462	1.015	0.04635	.63168	-.03584	.01202	.00142	-.09745 .07337
0	2.000	-0.009	0.05753	.63076	-.01967	.01204	.00121	.63168 .07702

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JGB NO.(3509-14)

SAL NO. 199

TEST NO. 0, CONFIGURATION..(1)

RUN NO. 56

TEST NO. RUN. LOG

THETA= 0, CONFIGURATION..(1)

RUN NO. 56

MACH NO. ALPHA C

REIT

RUN NO. 56

TEST NO. CL

YAW C

RUN NO. 56

TEST NO. CX

(CN) BODY

RUN NO. 56

TEST NO. CPM

(CY) BODY

RUN NO. 56

TEST NO. CRM

(CYM) BODY

RUN NO. 56

TEST NO. STAB

(CRM) BODY

RUN NO. 56

TEST NO. CD

(X CP/D)

RUN NO. 56

1201	56.463	2.031	.07751	.60506	-.05015	.00999	.00135	-.09745	.12810
3270	2.000	-.008	.09890	.60193	-.01654	.01003	.00100	.60506	.19293
0	464	3.046	.11216	.60509	-.06883	.01029	.00146	-.09696	.18535
0	2.000	-.008	.14415	.59828	-.01706	.01035	.00091	.60509	.22248
0	465	5.075	.16386	.64674	-.09632	.01016	.00195	-.09696	.25337
0	2.000	-.008	.22042	.62972	-.01724	.01029	.00104	.64674	.26302
0	466	7.101	.20917	.67186	-.12026	.01158	.00234	-.09429	.31133
0	2.000	-.009	.29061	.64086	-.01964	.01178	.00089	.67186	.28618
0	467	10.129	.22682	.74094	-.12924	.01028	.00288	-.09429	.30613
0	3.000	-.008	.35358	.68951	-.01700	.01063	.00103	.74094	.33449

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NAA SISD SUPersonic AERO LABORATORY TEST DATA PRINTOUT..(USE EDDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL No. 199

TEST NO. 20, CONFIGURATION..(12)

RUN NO. 57

TEST NO. RUN.LOG ALPHA C CL CPM CYM.STAB CRM.STAB (DP/Q)B (L/D)
MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CRM.BODY CD (X CP/D)

	1201	57.469	-10.044	-.15947	.83026	.16735	.00436	.00290	-.20883	-.19207
1575	2.000	-.021	-.30180	.78973	-.01165	.00379	.00361	.83026	.14548	

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN LOG ALPHA C CL CX CPM CYM. STAB CRM. STAB (DP/Q1B (L/D)

RUN NO. 58

THETA= 20, CONFIGURATION. (12)

MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CRM. BODY CD (X CP/D)

1201	58.470	20.271	.17418	1.00134	-.12437	.01338	-.00102	-.23121	.17395
1880	2.000	-.007	.51025	.87901	-.01287	.01220	-.00560	1.00134	.45627
0	.471	15.133	.16364	.94619	-.12103	.01202	-.00074	-.22817	.17295
0	2.000	-0	.40494	.87067	-.00852	.01141	-.00385	.94619	.40112
0	.472	10.026	.17382	.88234	-.12866	.01198	-.00132	-.23295	.19700
0	2.000	-.003	.32475	.83862	-.00749	.01157	-.00338	.88234	.30382
0	.473	25.435	.19178	1.05827	-.12274	.01538	-.00081	-.23599	.18122
0	2.000	-.013	.62763	.87338	-.01692	.01354	-.00733	1.05827	.50444
0	.474	30.615	.21437	1.12145	-.12295	.01673	-.00055	-.25294	.19115
0	2.000	-.018	.75553	.85603	-.01983	.01468	-.00805	1.12145	.53726

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT • (USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

THETA= 20, CONFIGURATION•(14) RUN NO. 59

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM•STAB	CRM•STAB	(DP/Q)B	(L/D)
MACH NO.	RELT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY	CD	(X CP/D)

1201	59.475	20.264	.17058	.99163	-.12474	.01174	-.00198	-.23166	.017201
1880	2.000	-.017	.50340	.87122	-.01580	.01033	-.00592	.99163	.045221
0	.476	15.124	.16108	.93718	-.12536	.C1181	-.00068	-.22818	.017188
0	2.000	-.001	.39998	.86271	-.00793	.01122	-.00374	.93718	.038657
0	.477	10.011	.16613	.88088	-.13251	.01122	-.00144	-.23296	.018860
0	2.000	-.001	.31670	.83860	-.00791	.01080	-.00337	.88088	.028160
0	.478	25.434	.19578	1.04198	-.12466	.01372	-.00158	-.23426	.018789
0	3.000	-.022	.62423	.85696	-.01935	.01172	-.00732	1.04198	.050030
0	.479	30.619	.21817	1.11237	-.12064	.01616	-.00016	-.25164	.019614
0	2.000	-.023	.75423	.84622	-.02142	.01382	-.00836	1.11237	.054005

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

THETA= 20, CONFIGURATION..(1)

RUN NO. 60

TEST NO. RUN LOG ALPHA C CL CX CPM CYM STAB (DP/Q)B (L/D)
MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CYM BODY CRM BODY CD (X CP/D)

1201	60.480	20.306	.16533	1.02288	-.08444	.01267	-.00087	-.23163	.16163	
1880	2.000	-.009	.50997	.90196	-.01294	.01158	-.00521	1.02288	.53443	
0	.481	15.144	.15220	.99656	-.09804	.01228	-.00066	-.23424	.15273	
0	2.000	-.001	.40722	.92220	-.00830	.01168	-.00384	.99656	.45923	
0	.482	10.038	.17539	.92236	-.11685	.01234	-.00186	-.22902	.19016	
A-82	0	2.000	-.004	.33344	.87769	-.01089	.01183	-.00399	.92236	.34955
0	.484	25.498	.19144	1.07273	-.06966	.01368	-.00116	-.23728	.17846	
0	3.000	-.023	.63451	.88589	-.02001	.01185	-.00694	1.07273	.59021	
0	.485	30.706	.21758	1.14425	-.05444	.01532	-.00052	-.25162	.19015	
0	3.000	-.033	.77128	.87280	-.02531	.01291	-.00827	1.14425	.62941	

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JGB NO.(3509-14)

SAL No. 199

THETA= 20, CONFIGURATION.(5)

RUN NO. 61

TEST No.	RUN.LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B (L/D)
MACH No.	RELT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CD (X CP/D)

1201	61.487	20.300	.16244	1.00432	-.08352	.01858	.00215	-.23202 .16174
1880	2.000	-.014	.50073	.88562	-.00747	.01818	-.00443	1.00432 .53321
0	.488	15.133	.14654	.98010	-.10029	.01245	-.00049	-.23115 .14951
0	2.000	-.001	.39727	.90788	-.00845	.01189	-.00373	.98010 .44755
0	.489	10.017	.16393	.92238	-.12086	.01299	-.00144	-.23028 .17772
0	2.000	-.001	.32183	.87982	-.00959	.01254	-.00367	.92238 .32447
0	.490	25.498	.19327	1.05914	-.06840	.01565	.00125	-.23636 .18248
0	2.000	-.005	.63031	.87284	-.01334	.01467	-.00561	1.05914 .59148
0	.491	30.712	.22232	1.13016	-.04950	.01751	.00228	-.25158 .19671
0	3.000	-.012	.76824	.85819	-.01818	.01622	-.00698	1.13016 .63557

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(5)

RUN NO. 62

TEST NO. RUN LOG ALPHA G CL CX CPM CYM. STAB CRM. STAB (DP/Q)B (L/D)

MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CRM.BODY CRM. BODY (X CP/D)

1201 62.492 -.035 -.00880 .72102 -.02004 .01260 .00087 -.25143 -.01221

1880 2.000 -.013 -.00924 .72101 -.01442 .01259 .00088 .72102 2.86874

0 .493 -1.074 -.04249 .72758 .00482 .01091 .00078 -.24926 -.05840

0 2.000 -.013 -.05612 .72695 -.01327 .01089 .00099 .72758 .61411

0 .494 -2.117 -.07428 .73180 .02493 .01103 .00060 -.24926 -.10150

A-.84 0 2.000 -.010 -.10125 .72855 -.01212 .01100 .00101 .73180 .45376

0 .495 -3.156 -.09981 .75478 .04086 .01074 .00047 -.24882 -.13224

0 2.000 -.008 -.14120 .74814 -.01129 .01069 .00106 .75478 .41065

0 .496 -5.233 -.14207 .81924 .06846 .01142 .00022 -.25796 -.17342

0 2.000 -.005 -.21618 .80288 -.01042 .01135 .00126 .81924 .38333

0 .497 -10.397 -.15476 .95337 .05854 .01220 -.00079 -.25970 -.16233

0 2.000 -.005 -.32424 .90980 -.00680 .01215 .00142 .95337 .51945

0 .498 1.006 .02301 .72230 -.04108 .01331 .00106 -.25013 .03186

0 2.000 -.015 .03569 .72179 -.01584 .01333 .00083 .72230 -.45103

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO. (3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION.. (5)

RUN NO. 62

TEST NO. RUN LOG ALPHA C CL CX CPM CYM STAB (DP/Q)B (L/D)

MACH NO. RE11 YAW C (CN)BODY (CA)BODY (CY)BODY CRM BODY CRM BODY CD (X CP/D)

1201	62.499	2.047	.05441	.73082	-.06190	.01275	.00123	-.24969	.07445	
1880	2.000	-.014	.08048	.72841	-.01519	.01279	.00078	.73082	-.06914	
0	.500	3.088	.08237	.75130	-.08018	.01400	.00162	-.25100	.10963	
0	2.000	-.016	.12271	.74578	-.01692	.01407	.00086	.75130	.04660	
0	.501	5.166	.12676	.80418	-.10819	.01366	.00204	-.25665	.15763	
0	2.000	-.017	.19864	.78950	-.01712	.01379	.00080	.80418	.15535	
1-85	0	.502	7.239	.15631	.85597	-.12521	.01391	.00261	-.26231	.18262
0	2.000	-.020	.26290	.82946	-.01887	.01413	.00084	.85597	.22373	
0	.503	10.324	.14665	.95493	-.11603	.01235	.00329	-.26144	.15357	
0	3.000	-.021	.31538	.91320	-.01805	.01274	.00102	.95493	.33208	

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT••(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(1)

RUN NO. 63

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM	CRM-STAB	(DP/Q)B	(L/D)	(X CP/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CRM.BODY	CRM.BODY	CD		

1201	63.504	-.014	-.00523	.69265	-.00517	.01063	.00092	-.24697	-.00756	
1880	2.000	-.015	-.00540	.69265	-.01423	.01063	.00092	.69265	1.76785	
0	.505	-1.055	-.03841	.70554	.01634	.00964	.00082	-.24740	-.05445	
0	2.000	-.013	-.05140	.70471	-.01255	.00963	.00100	.70554	.38211	
0	.506	-2.096	-.06900	.72516	.03599	.00899	.00072	-.24784	-.09516	
A-86	0	2.000	-.012	-.09548	.72215	-.01146	.00896	.00105	.72516	.32304
0	.507	-3.136	-.09700	.74604	.05502	.00869	.00063	-.24958	-.13003	
0	2.000	-.011	-.13766	.73961	-.01108	.00865	.00110	.74604	.30035	
0	.508	-5.213	-.14363	.79625	.08495	.00861	.00045	-.25567	-.18038	
0	2.000	-.009	-.21538	.77991	-.00999	.00854	.00123	.79625	.30559	
0	.509	-10.359	-.15101	.95702	.08831	.00789	.00007	-.25829	-.15779	
0	2.000	-.005	-.32061	.91428	-.00767	.00775	.00149	.95702	.42456	
0	.510	1.027	.02769	.69616	-.02736	.01101	.00107	-.24566	.03978	
0	2.000	-.016	.04017	.69555	-.01465	.01102	.00087	.69616	.01882	

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(1)

RUN NO. 63

TEST NO.	RUN NO.	LOG	ALPHA	C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B	(L/D)
MACH NO.	RELT	YAW	C	(CN)BODY	(CA)BODY	(CY)BODY		CYM. BODY	CRM. BODY	CD	(X CP/D)
1201	63.511	2.069	.05919	.71552	-.04815	.01139	.00127	-.24609	.08272		
1880	2.000	-.016	.08497	.71292	-.01517	.01143	.00086	.71552	.13337		
0	.512	3.108	.08752	.73664	-.06712	.01158	.00149	-.24827	.11881		
0	2.000	-.017	.12733	.73081	-.01581	.01164	.00086	.73664	.17281		
0	.513	5.186	.13478	.78948	-.09873	.01211	.00197	-.25350	.17072		
A-87	0	3.000	-.020	.20557	.77407	-.01760	.01224	.00087	.78948	.21974	
0	.514	7.259	.16587	.84824	-.11762	.01311	.00258	-.25959	.19554		
0	3.000	-.024	.27170	.82049	-.01983	.01333	.00091	.84824	.26710		
0	.515	10.342	.15621	.95589	-.11206	.01126	.00311	-.26046	.16342		
0	3.000	-.024	.32525	.91233	-.01872	.01163	.00104	.95589	.35546		

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199 THETA= 0, CONFIGURATION. (12) RUN NO. 64

TEST NO. RUN.LOG ALPHA C CL CX CPM CYM-STAB CRM-STAB (UP/Q)B (L/D) MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CRM.BODY CRM. BODY CO (X CP/D)

1201	64.516	-.012	-.00339	.74867	-.00640	.00901	.00098	-.24950	-.00453
1880	2.000	-.008	-.00354	.74867	-.01007	.00901	.00098	.74867	2.50492
0	.517	-1.052	-.03302	.75616	.01373	.00918	.00085	-.24950	-.04367
0	2.000	-.008	-.04689	.75543	-.01014	.00917	.00102	.75616	.40715
0	.518	-2.088	-.06000	.76916	.03371	.00866	.00077	-.24950	-.07801
0	2.000	-.006	-.08798	.76646	-.00888	.00862	.00109	.76916	.31683
0	.519	-3.125	-.08418	.78647	.05100	.00813	.00069	-.25167	-.10704
0	2.000	-.004	-.12692	.78072	-.00766	.00808	.00113	.78647	.29815
0	.520	-5.192	-.12308	.82057	.08014	.00751	.00057	-.25560	-.15000
0	2.000	-.002	-.19683	.80607	-.00616	.00743	.00125	.82057	.29286
0	.521	-10.337	-.15696	.90837	.10480	.00676	.00024	-.25560	-.17279
0	2.000	-.003	-.31737	.86547	-.00609	.00661	.00145	.90837	.36978
0	.522	1.026	.02561	.75536	-.02743	.00940	.00113	-.24993	.03390
0	2.000	-.009	.03913	.75478	-.01064	.00942	.00096	.75536	-.00102

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NAA SJSD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT••(USE EDPM PROGRAMS 2K176+1991 JOB NO. (3509-14))

SAL NO. 199

TEST NO. RUN LOG ALPHA C CL CX CPM CYM. STAB CRM. STAB IOP/QIB (L/D) RUN NO. 64

MACH NO.	RELT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CD	(X CP/D)
1201	64.523	2.065	.05460	.76497	-.04812	.01004	.00130	-.24993	.07137
1880	2.000	-.010	.08212	.76251	-.01142	.01008	.00094	.76497	.11405
0	.524	3.100	.07796	.77983	-.06520	.00988	.00146	-.25080	.09997
0	2.000	-.010	.12001	.77448	-.01143	.00994	.00093	.77983	.15673
0	.525	5.170	.12222	.78910	-.09630	.01107	.00191	-.25429	.15488
0	2.000	-.014	.19281	.77488	-.01405	.01119	.00091	.78910	.20056
0	.526	7.235	.14799	.85747	-.11738	.01154	.00246	-.25777	.17259
0	2.000	-.016	.25478	.83201	-.01526	.01175	.00099	.85747	.23928
0	.527	10.319	.16074	.90744	-.12714	.01188	.00309	-.25821	.17714
0	3.000	-.018	.32066	.86398	-.01651	.01225	.00092	.90744	.30348

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NAA SISD SUPersonic AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(14)

RUN NO. 65

TEST NO. RUN.LOG ALPHA C CL CX CPM CRM STAB (DP/Q)B (L/D)

MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CRM.BODY CRM.CD (X CP/D)

1201	65.528	-0.031	-0.00719	0.77886	-0.01886	0.01119	0.00099	-0.25294	-0.00923
1880	2.000	-0.006	-0.00762	0.77886	-0.01046	0.01119	0.00100	.77886	3.17706
0	0.529	-1.070	-0.03672	0.77783	-0.00197	0.00989	0.00087	-0.25294	-0.04721
0	2.000	-0.004	-0.05124	0.77701	-0.00882	0.00987	0.00106	.77783	0.66151
0	0.530	-2.108	-0.06493	0.77491	0.02223	0.01086	0.00067	-0.24858	-0.08380
0	2.000	-0.004	-0.09339	0.77200	-0.00957	0.01083	0.00107	.77491	0.46194
0	0.531	-3.143	-0.08551	0.79590	0.03702	0.01068	0.00053	-0.25251	-0.10743
0	2.000	-0.001	-0.12900	0.79001	-0.00796	0.01063	0.00111	.79590	0.41302
0	0.532	-5.211	-0.12024	0.83355	0.06066	0.01215	0.00013	-0.25643	-0.14425
0	2.000	-0.001	-0.19544	0.81919	-0.00905	0.01209	0.00124	.83355	0.38963
0	0.533	-10.362	-0.14901	0.91758	0.07369	0.00998	-0.00040	-0.25512	-0.16239
0	2.000	-0.009	-0.31159	0.87583	-0.00331	0.00989	0.00140	.91758	0.46351
0	0.534	1.008	0.02258	0.78709	-0.04055	0.01128	0.00111	-0.25294	0.02869
0	2.000	-0.005	0.03642	0.78657	-0.01037	0.01130	0.00092	.78709	-0.41339

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN.LOG

RUN NO. 65

THETA= 0, CONFIGURATION..(14)

MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	CX	CPM	CRM-STAB	CRM-QB (L/D)	CRM-BODY	CD (X CP/D)
1201	65.535	2.046	.05043	.78748	-.06036	.01166	.00136	-.25207	.06404	
1880	2.000	-.007	.07851	.78518	-.01121	.01170	.00095	.78748	-.06882	
0	.536	3.083	.07500	.79540	-.07775	.01258	.00160	-.25338	.09429	
0	2.000	-.008	.11766	.79022	-.01229	.01265	.00092	.79540	.03925	
0	.537	5.150	.10988	.82947	-.10302	.01151	.00198	-.25643	.13247	
0	2.000	-.008	.18388	.81626	-.01198	.01164	.00094	.82947	.13976	
0	.538	7.215	.13652	.86673	-.12211	.00747	.00183	-.25904	.15751	
0	2.000	-.002	.24427	.84272	-.00635	.00764	.00088	.86673	.20010	
0	.539	10.303	.15226	.90653	-.12969	.01286	.00320	-.25861	.16796	
0	2.000	-.016	.31192	.86469	-.01635	.01323	.00084	.90653	.28422	

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SID 62-343

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199 RUN NO. 66

THETA= 20, CONFIGURATION..(12)

TEST NO. RUN.LOG ALPHA C CL CPM CYM STAB (OP/QIB LL/D)

MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CYM BODY CRM BODY CD (X CP/D)

1201	66.542	10.089	.10917	.24777	-.04678	.00536	-.00074	-.10195	.44058
1575	2.000	-.007	.15087	.22483	-.00114	.00515	-.00167	.24777	.38994

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

THETA= 20, CONFIGURATION..(12)

RUN NO. 67

TEST NO.	RUN.LG6	ALPHA C	CL	CX	CPM	CYM.STAB	CRM.STAB	(DP/Q)B	(L/D)
MACH NO.	RELT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY	CD	(X CP/D)

1201	67.543	.437	.27186	.97909	.00279	.01594	.00071	-.15046	.27767	
2490	2.000	-.006	.27932	.97699	-.00759	.01595	.00059	.97909	.71000	
0	54.4	-4.667	.23579	.87423	.00724	.00932	-.00037	-.14660	.26971	
0	2.000	-.002	.16388	.89051	-.00520	.00932	.00039	.87423	.74418	
0	54.5	-9.745	.21560	.77403	.00426	.00881	-.00056	-.14531	.27854	
A-93	0	2.000	-.004	.08150	-.79936	-.00376	.00878	.00094	.75230	
0	54.6	5.546	.28906	1.06237	.00894	.01346	.00024	-.14917	.27209	
0	2.000	-.003	.39037	1.02947	-.01177	.01342	-.00106	1.06237	.72290	
SID	0	54.7	10.646	.27391	1.14264	.03002	.01496	.00048	-.16590	.23972
	0	2.000	-.005	.48025	1.07238	-.01409	.01479	-.00229	1.14264	.76251
	0	54.8	.437	.27056	.97589	.00382	.01498	.00071	-.14788	.27724
	2.000	-.007	.27798	.97380	-.00626	.01499	.00060	.97589	.71373	

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN LOG

RUN NO. 68

THETA= 20, CONFIGURATION..(14)

TEST NO. RUN LOG ALPHA C CL CX CPM CYN STAB CRM STAB (DP/Q)B (L/D)

MACH NO.	RELT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM BODY	CRM BODY	CD	(X CP/D)
1201	68.549	20.233	.26857	.96517	-.17069	.01429	.00039	-.14959	.27826
2490	2.000	-.004	.58573	.81278	-.00781	.01354	-.00458	.96517	.40859
0	.550	15.125	.23345	.87122	-.15960	.01056	-.00004	-.14689	.26795
0	2.000	-.004	.45265	.78015	-.00474	.01018	-.00279	.87122	.34742
0	.551	10.040	.20120	.78494	-.14150	.00974	-.00041	-.14663	.25632
0	2.000	-.005	.33493	.73786	-.00364	.00952	-.00210	.78494	.27752
0	.553	25.346	.29129	1.05060	-.17147	.01590	.00303	-.15023	.27726
0	2.000	-.005	.71293	.82483	-.00857	.01567	-.00406	1.05060	.45949
0	.554	30.471	.31398	1.13789	-.17175	.01609	.00176	-.16464	.27593
0	2.000	-.001	.84756	.82160	-.01212	.01476	-.00664	1.13789	.49736

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SID 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. (USE EDPM PROGRAMS 2K176+199) JBB NO. (3509-14)

SAL NO. 199

TEST NO. RUN LOG ALPHA C CL CX CPM CYM. STAB CRM. STAB (DP/Q)B (L/D)

MACH NO. REII YAW C (CN) BODY (CA) BODY (CY) BODY CRM. BODY CD (X CP/D)

RUN NO. 69

THETA= 20, CONFIGURATION. (1)

1201	69.555	20.267	.26575	.99057	-.12416	.00764	-.00316	-.14999	.26828
2490	2.000	-.016	.59238	.83722	-.01593	.00608	-.00561	.99057	.49041
0	.556	15.148	.22699	.89545	-.12117	.00927	-.00037	-.14948	.25350
0	2.000	-.003	.45307	.80504	-.00474	.00885	-.00278	.89545	.43256
0	.557	10.053	.19916	.81162	-.11931	.00669	-.00028	-.14472	.24538
0	2.000	-.003	.33775	.76441	-.00319	.00654	-.00144	.81162	.34674
0	.558	25.401	.30325	1.09458	-.12566	.01313	-.00026	-.15076	.27705
0	2.000	-.008	.74338	.85876	-.01446	.01175	-.00587	1.09458	.53096
0	.559	30.505	.28615	1.18879	-.11154	.01487	.00007	-.16889	.24071
0	2.000	-.013	.84990	.87908	-.01894	.01285	-.00748	1.18879	.56877

SID 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

TEST NO. 20, CONFIGURATION. (5)

RUN NO. 70

MACH NO.	RELL	YAW C.	(CN) BODY	(CA) BODY	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B	(L/D)	(X CP/D)
1201	70.561	20.266	.26795	.97867	-.12669	.01573	.00156	-.15050	.27379		
2490	2.000	-.008	.59030	.82531	-.00604	.01529	-.00399	.97867	.48538		
0	.562	15.140	.22274	.89141	-.12712	.c1053	.00071	-.14960	.24987		
0	2.000	-.010	.44778	.80232	-.00151	.01035	-.00207	.89141	.41611		
0	.563	10.035	.18195	.81578	-.12042	.00867	-.00024	-.14703	.22303		
A-96	0	2.000	-.005	.32129	.77161	-.00276	.00850	-.00174	.81578	.32519	
0	.564	25.402	.30523	1.08365	-.12267	.01572	.00231	-.15153	.28167		
0	2.000	-.006	.74051	.84801	-.00793	.01519	-.00466	1.08365	.53434		
0	.565	30.522	.29364	1.17838	-.09355	.01796	.00227	-.16889	.24919		
0	2.000	-.006	.85132	.86605	-.01678	.01662	-.00716	1.17838	.59011		

SID 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(1)

RUN NO. 71

TEST NO.	RUN.LOG	ALPHA.C	CL	CX	CPM	CYM.STAB	CRM.BODY	CRM.BODY	DP/Q/B (L/D)	CD	(X CP/D)
MACH NO.	RELT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY						

1201	71.566	-0.007	-0.00096	.63007	-.00831	.00911	.00076	-.15345	-.00153	
2490	3.000	-0.010	-.00104	.63007	-.01282	.00911	.00076	.63007	8.67983	
0	567	-1.037	-.03865	.63056	.01489	.00647	.00055	-.15332	-.06129	
0	3.000	-0.007	-.05005	.62976	-.00885	.00646	.00067	.63056	.40258	
0	568	-2.064	-.06958	.64711	.03359	.00643	.00076	-.15345	-.10753	
A-97	0	3.000	-.007	-.09284	.64419	-.00871	.00640	.00099	.64711	.33821
0	569	-3.090	-.09523	.66553	.04821	.00709	.00080	-.15409	-.14308	
0	2.000	-0.006	-.13096	.65943	-.00894	.00703	.00118	.66553	.33189	
0	570	-5.143	-.14454	.69215	.07398	.00606	.00083	-.15396	-.20882	
0	2.000	-0.003	-.20599	.67641	-.00641	.00596	.00137	.69215	.34084	
0	571	-10.351	-.32853	.85471	.14521	.00569	.00076	-.14895	-.38438	
0	2.000	-0.002	-.47672	.78179	-.00498	.00546	.00176	.85471	.39541	
0	572	1.022	.03443	.63303	-.02986	.01048	.00099	-.15332	.05440	
0	3.000	-.011	.04572	.63231	-.01472	.01050	.00081	.63303	.04685	

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NAA SISD SUPPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(1)

RUN NO. 71

TEST NO. RUN.LOG ALPHA C CL CX CPM CYM STAB IDP/Q)B (L/D)

MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CYM BODY CRM BODY CD IX CP/DI

1201	71.573	2.050	0.06790	.64212	-.05034	.01170	.00115	-.15267	.10574
2490	2.000	-.012	.09083	.63928	-.01614	.01173	.00073	.64212	.14579
0	.574	3.078	.09797	.66030	-.06860	.01079	.00133	-.15280	.14838
0	2.000	-.011	.13328	.65409	-.01470	.01085	.00074	.66030	.18530
0	.575	5.133	.15049	.68850	-.09538	.00975	.00166	-.15242	.21858
0	3.000	-.013	.21148	.67228	-.01514	.00986	.00078	.68850	.24896
0	.576	7.183	.18825	.73435	-.11495	.00996	.00218	-.15087	.25635
0	3.000	-.014	.27859	.70506	-.01619	.01016	.00092	.73435	.28737
0	.577	10.231	.18295	.82645	-.11387	.00954	.00268	-.15139	.22137
0	3.000	-.015	.32680	.78083	-.01635	.00987	.00094	.82645	.35156

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NAA SISD SUPersonic AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(5)

RUN NO. 72

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM-STAB	CRM-STAB (DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY	CD

1201	72.578	-.018	-.00016	.66442	-.02435	.01061	.00079	-.15870	-.00024
2490	2.000	-.010	-.00037	.66442	-.01395	.01061	.00080	.66442	29.70005

0	.579	-1.050	-.03615	.67835	-.00460	.00958	.00062	-.15973	-.05330
0	2.000	-.006	-.04857	.67757	-.01075	.00956	.00080	.67835	.79471

0	.580	-2.078	-.06815	.67947	-.01418	.00910	.00081	-.15870	-.10029	
A-99	0	2.000	-.005	-.09274	.67655	-.00970	.00906	.00114	.67947	.54709

0	.581	-3.104	-.09076	.68978	-.02597	.00838	.00069	-.15896	-.13158
0	2.000	-.003	-.12797	.68385	-.00759	.00833	.00114	.68978	.49703

0	.582	-5.162	-.14307	.71899	-.04980	.00782	.00063	-.15819	-.19899	
SID	0	2.000	-.0	-.20717	.70321	-.00580	.00773	.00133	.71899	.45962

0	.585	-10.269	-.17629	.82758	-.05296	.00918	-.00004	-.15137	-.21302
0	2.000	-.002	-.32097	.78291	-.00522	.00904	.00159	.82758	.53499

0	.586	1.010	.03399	.67323	-.04594	.00950	.00093	-.15844	.05048
0	2.000	-.009	.04585	.67253	-.01248	.00951	.00076	.67323	-.30201

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JGB NG.(3509-14)

SAL NO. 199 THETA= 0, CONFIGURATION..(5) RUN NG. 72

TEST NO. RUN.LG.G ALPHA.C CL CX CPM CYM.STAB CRM.STAB (DP/QIB (L/D)
MACH NO. REFL YAW C (CN)BODY (CA)BODY (CY)BODY CRM.BODY CD (X CP/D)

1201	72.588	2.038	.06754	.68313	-.06826	.01161	.00118	-.15780	.09886
2490	2.000	-.010	.09179	.68030	-.01450	.01164	.00077	.68313	-.04370
0	.589	3.063	.09549	.69294	-.08710	.01263	.00141	-.15716	.13780
0	2.000	-.011	.13237	.68685	-.01584	.01268	.00073	.69294	.04203
0	.591	5.124	.15366	.71808	-.11494	.01084	.00182	-.15690	.21399
0	2.000	-.010	.21717	.70149	-.01432	.01096	.00085	.71808	.17076
0	.592	7.169	.17595	.74937	-.12135	.01110	.00233	-.15561	.23480
0	3.000	-.013	.26807	.72157	-.01631	.01130	.00093	.74937	.24733
0	.593	10.213	.16580	.82755	-.11519	.00986	.00263	-.15407	.20035
0	3.000	-.012	.30989	.78505	-.01477	.01017	.00084	.82755	.32830

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NAA SISD SUPersonic AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JGB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(12)

RUN NO. 7:

TEST NO.	RUN. LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB (DP/QIB (L/D))	CYM. BODY	CRM. BODY	CD	(X CP/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY						

1201	73.594	-.007	-.00153	.68397	-.00177	.00974	.00086	-.15791	-.00224		
2490	2.000	-.008	-.00162	.68397	-.01185	.00974	.00086	.68397	5.50779		
0	595	-1.034	-.03303	.68208	.01223	.00914	.00074	-.15791	-.04842		
0	2.000	-.007	-.04533	.68138	-.01127	.00913	.00090	.68208	.43021		
0	596	-2.059	-.05818	.68964	.02735	.00902	.00075	-.15778	-.08437		
A-101	0	2.000	-.006	-.08292	.68711	-.00991	.00899	.00107	.68964	.37020	
0	597	-3.083	-.08222	.69749	.04250	.00891	.00077	-.15714	-.11788		
0	2.000	-.004	-.11961	.69206	-.00904	.00886	.00125	.69749	.34466		
0	598	-5.128	-.12220	.71695	.06786	.00764	.00075	-.15649	-.17044		
0	2.000	-.001	-.18578	.70316	-.00630	.00755	.00143	.71695	.33472		
0	599	-10.241	-.20197	.80005	.11719	.00501	.00066	-.15263	-.25245		
0	2.000	-0	-.34097	.75141	-.00337	.00481	.00154	.80005	.35630		
0	600	1.019	.02872	.68677	-.02760	.00973	.00103	-.15778	.04184		
0	2.000	-.007	.04093	.68615	-.01138	.00974	.00086	.68677	.02571		

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. (USE EDPM PROGRAMS 2K176+199) JOB NO. (3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(12) RUN NO. 73

TEST NG.	RUN,LG	ALPHA_C	CL	CX	CPM	CYM-STAB	CRM-STAB (DP/Q)B	(L/D)
MACH NG.	REIT	YAW_C	(CN)BODY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY	CD (X CP/D)
1201	73.601	2.046	.05836	.68772	-.04635	.01081	.00129	-.15714 .08487
2490	2.000	-.008	.08287	.68520	-.01293	.01084	.00090	.68772 .14063

0	.602	3.070	.08407	.69007	-.06233	.00994	.00135	-.15688 .12182
0	2.000	-.008	.12090	.68458	-.01230	.01000	.00082	.69007 .18444
0	.603	5.120	.13252	.70276	-.09182	.01079	.00180	-.15585 .18857
0	2.000	-.010	.19469	.68814	-.01399	.01091	.00083	.70276 .22838
0	.604	7.162	.16290	.74506	-.11251	.01152	.00237	-.15276 .21864
0	2.000	-.012	.25450	.71894	-.01595	.01172	.00092	.74506 .25791
0	.605	10.224	.20104	.79016	-.13670	.01242	.00289	-.15430 .25443
0	3.000	-.013	.33808	.74193	-.01745	.01274	.00064	.79016 .29565

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO. (3509-14))

SAL NO. 199 THETA= 0, CONFIGURATION• (14) RUN NO. 74

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B (L/D)
MACH NO.	RELT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY	CD (X CP/D)
1201	74.606	-.016	.00225	.70549	-.02490	.01071	.00087	-.15841 .00319
2490	2.000	-.007	.00205	.70549	-.01214	.01070	.00088	.70549 -11.42993

0	.607	-1.043	-.02774	.70664	-.00636	.00914	.00070	-.15969 -.03925
0	2.000	-.004	-.04060	.70602	-.00932	.00913	.00087	.70664 .85674
0	.609	-2.070	-.05473	.70828	-.00985	.00936	.00075	-.15867 -.07728
A-103	0	2.000	-.005	-.08027	.70584	-.00961	.00932	.00109 .70828 .57726
0	.610	-3.095	-.08074	.71339	.02560	.00862	.00071	-.15776 -.11318
0	2.000	-.003	-.11914	.70799	-.00790	.00857	.00117	.71339 .48509
0	.611	-5.143	-.12012	.72726	.04663	.00838	.00064	-.15751 -.16516
0	2.000	0	-.18481	.71357	-.00596	.00829	.00139	.72726 .44771
0	.612	-10.236	-.19034	.80413	.10902	.00770	-.00008	-.15171 -.23671
0	2.000	-.004	-.33019	.75752	-.00274	.00759	.00129	.80413 .36983
0	.613	1.010	.03074	.71188	-.04349	.01027	.00115	-.15789 .04318
0	2.000	-.007	.04328	.71123	-.01163	.01C29	.00097	.71188 -.30499

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199 THETA= 0, CONFIGURATION..(14) RUN NO. 74

TEST NO. RUN.LOG ALPHA C CL CX CPM CYM.STAB CRM.STAB (DP/Q)B (L/D)
MACH NO. REFL YAW C (CN)BODY (CA)BODY (CY)BODY CRM.BODY CO (X CP/D)

1201	74.614	2.034	.05770	.71632	-.06196	.01144	.00143	-.15712	.08055
2490	2.000	-.007	.08309	.71382	-.01296	.01149	.00102	.71632	-.04574
0	.615	3.058	.08191	.72533	-.07907	.01206	.00149	-.15738	.11293
0	2.000	-.006	.12048	.71993	-.01277	.01212	.00084	.72533	.04370
0	.616	5.103	.11720	.74312	-.09923	.01144	.00194	-.15519	.15772
A-104	0	2.000	-.008	.18282	.72975	-.01350	.01157	.00091	.74312
0	.618	7.148	.15156	.75321	-.11791	.01199	.00234	-.15326	.20122
0	2.000	-.010	.24409	.72851	-.01522	.01219	.00083	.75321	.21694
SID 0	.619	10.211	.18639	.79793	-.13737	.01205	.00282	-.15429	.23359
62-343	0	2.000	-.010	.32487	.75226	-.01540	.01236	.00064	.79793

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NAA SISD SUPersonic AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JGB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(14)

RUN NO. 75

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	IDP/QIB	IDL/D
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CD	IX CP/D

1201	75.621	-0.009	.01159	.67913	-.03053	.00881	.00105	-.12847	.01707
2770	2.000	-0.004	.01148	.67913	-.00934	.00881	.00105	.67913	-1.95908
	0	.622	-1.033	-.02104	.67496	-.01233	.00904	.00098	-.12959
	0	2.000	-0.003	-.03320	.67447	-.00883	.00902	.00114	.67496
	A	0	.623	-2.055	-.05021	.67895	.00436	.00851	.00095
	A-105	0	2.000	-.002	-.07451	.67671	-.00772	.00847	.00125
	0	.624	-3.075	-.07813	.68169	.02156	.00850	.00091	-.12751
	0	2.000	-0.002	-.11458	.67651	-.00757	.00843	.00136	.68169
STD	0	.625	-5.116	-.12675	.69263	.04829	.0767	.00083	-.12558
62-343	0	2.000	-.001	-.18800	.67857	-.00487	.00757	.00151	.69263
	0	.626	-10.216	-.22405	.76151	.09632	.00593	.00055	-.12190
	0	2.000	-.004	-.35554	.70971	-.00096	.00574	.00159	.76151
	0	.627	1.013	.04181	.67971	-.04874	.01007	.00111	-.12574
	0	2.000	-.005	.05382	.67887	-.01086	.01009	.00094	.67971
	0	2.000	-.005	-.05382	.67887	-.01086	.01009	.00094	-.20569

NAA SISD SUPersonic AERO LABORATORY TEST DATA PRINTOUT. (USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(14)

RUN NO. 75

TEST NO.	RUN.LG	ALPHA C	CL	CX	CPM	CYM.STAB	CRM.STAB (DP/Q)B	(L/D)
MACH NO.	RELT	YAW C	(CN)BDY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY	CD (X CP/D)

1201	75.628	2.033	0.6913	0.68395	-.06700	.01172	.00141	-.12494	.010107	
2770	2.000	-.005	0.9334	0.68107	-.01271	.01177	.00099	.68395	-.01779	
	0	.629	3.052	.09295	.069208	-.08178	.01095	.00147	-.12494	.013431
	0	2.000	-.004	.12966	.088615	-.01127	.01102	.00088	.69208	.06923
	0	.630	5.087	.12800	.070997	-.10119	.01006	.00186	-.12238	.018028
A-106	0	2.000	-.006	.19043	.09583	-.01164	.01019	.00097	.70997	.016866
	0	.631	5.087	.12799	.070997	-.10112	.01015	.00182	-.12366	.018027
	0	2.000	-.006	.19043	.09583	-.01195	.01028	.00091	.70997	.016897
SID 0	632	7.121	.16019	.72355	-.11943	.01063	.00236	-.12174	.022139	
62-343	0	2.000	-.007	.24863	.069812	-.01300	.01084	.00103	.72355	.021964
	0	.634	10.175	.20803	.75958	-.14685	.01043	.00294	-.12334	.027387
	0	2.000	-.007	.33891	.71090	-.01352	.01079	.00105	.75958	.026671

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

THETA= 20, CONFIGURATION..(12)

RUN NO. 76

TEST NO. RUN.LOG ALPHA C CL CX CPM CYM.STAB CRM.STAB (DP/Q18 (L/D)

MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CRM.BODY CD (X CP/D)

1201	76.636	20.204	.30491	.97781	-.18910	.01208	-.00054	-.12316	.31183	
2770	3.000	-.001	.62378	.81239	-.00970	.01115	-.00468	.97781	.39686	
0	.637	15.122	.27319	.84892	-.17291	.00973	-.00040	-.11915	.32181	
0	2.000	-.002	.48516	.74828	-.00527	.00929	-.00292	.84892	.34360	
0	.638	10.052	.22763	.74670	-.14384	.00801	-.00042	-.11867	.30486	
A-107	0	2.000	-.004	.35445	.69551	-.00228	.00781	-.00181	.74670	.29419
0	.639	25.284	.31166	1.06819	-.18921	.01453	.00108	-.12316	.29177	
0	3.000	-.001	.73797	.83281	-.00982	.01360	-.00523	1.06819	.44361	
SID 0	.640	30.312	.30035	1.14715	-.26622	.01393	.00075	-.13006	.26182	
62-343	0	2.000	-.005	.83818	.83883	-.01379	.01241	-.00638	1.14715	.38238

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

THETA 20. CONFIGURATION.(14)

RUN NO. 77

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B	(L/D)	
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CD	(X CP/D)	
1201	77.642	20.199	30286	.96280	-.19248	.01241	-.00034	-.12209	.31457	
2770	4.000	-.001	.61663	.79905	-.00959	.01153	-.00460	.96280	.38784	
0	.643	15.115	.26567	.84717	-.17633	.01012	-.00046	-.11889	.31359	
0	2.000	-.002	.47734	.74861	-.00580	.00965	-.00308	.84717	.33061	
0	.644	10.042	.21898	.75158	-.15000	.00777	-.00037	-.11937	.29136	
A-108	0	2.000	-.004	.34666	.70189	-.00217	.00759	-.00172	.75158	.26730
0	.646	25.286	.31740	1.05408	-.19106	.01460	.00013	-.12097	.30111	
0	2.000	-.004	.73715	.81758	-.01340	.01325	-.00612	1.05408	.44082	
E0	0	.647	30.366	.29720	1.13508	-.16880	.01486	.00109	-.13024	.26183
62-343	0	2.000	-.004	.83015	.82921	-.01361	.01338	-.00658	1.13508	.49667

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NAAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. (USE EDPM PROGRAMS 2K176+199) JOB NO. (3509-14)

RUN NO. 78
SAL NO. 199
THETA= 20, CONFIGURATION..(1)

TEST NO. RUN.LOG ALPHA C CL CX CPM CYM.STAB CRM.STAB (DP/Q)B (L/D)

MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CYM. BODY CRM. BODY CD (X CP/D)

1201	78.648	20.231	.30923	.99644	-.15236	.01107	-.00086	-.12516	.31034
2770	2.000	-.004	.63468	.82807	-.01079	.01009	-.00463	.99644	.45995

0 .649 15.134 .26228 .86623 -.13963 .00804 -.00038 -.12117 .30278

0 2.000 -.003 .47930 .76773 -.00366 .00766 -.00246 .866623 .40867

0 .650 10.052 .21192 .77481 -.12255 .00718 -.00076 -.11749 .27351

0	.652	25.328	.32808	1.10771	-.14871	.01354	.00068	-.12452	.29618
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0	3.000	- .002	.77035	.886094	- .01153	.01253	- .00518	1.10771	.50696
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0 .653 30.411 .29906 1.19335 -.11673 .01425 .00044 -.13059 .25061

0 2.000 -0.009 .86190 .87786 -.01756 .01252 -.00683 1.19335 .56456

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RIIN NO. 76
SAI NO. 100
THETA= 200 CONFIGURATION-(5)

BIRN-NP-25

1201 79-654 20,226 30876 98159 115744 201084 = 00068 - 12548 : 31455

2770 2.000 -0.002 62903 .81435 -0.00993 -.00438 .98159 .44971

121:51 660:10

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0	.656	10.040	•20192	.77442	-•12955	•00683	-.00036	-•12021	•26073
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0 .658 25.330 .33499 1.09156 -.14917 .01230 -.00042 -.12516 .30689

0 2.000 - .005 .76972 .84335 -.01287 .01094 -.00564 1.00156 • 50620

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S 3000 - 007 86150 86068 - 01405 01321 - 00664 1 17827 57151 4

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NAA SI SD SUPERSONIC AERG LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JGB NG.(3509-14)

SAL NO. 199 THETA= 0, CONFIGURATION..(15) RUN NG. 80

TEST NO.	RUN.LOG	ALPHA C	CL	CX	CPM	CYM.STAB	CRM.STAB (DP/Q)B	(L/D)
MACH NO.	RELT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY	(X CP/D)
1201	80.660	- .011	.00885	.64585	- .03068	.00836	.00097	- .12995 .01370
2770	2.000	- .007	.00872	.64586	- .01108	.00836	.00097	.64585 -2.81926
0	.661	-1.037	- .02860	.64772	- .01077	.00930	.00085	- .13059 -.04416
0	2.000	- .006	- .04032	.64709	- .01124	.00928	.00102	.64772 .96703
0	.662	-2.062	- .06356	.65344	.00852	.00710	.00092	- .13075 -.09727
A-111	0	2.000	- .003	- .08703	.65073	- .00751	.00706	.00118 .60212
0	.663	-3.086	- .09496	.66592	.02542	.00692	.00087	- .12979 -.14261
0	2.000	- .003	- .13067	.65984	- .00707	.00686	.00124	.66592 .50546
0	.664	-5.130	- .14529	.68795	.04852	.00631	.00085	- .12947 -.21119
0	2.000	- .001	- .20621	.67221	- .00503	.00621	.00141	.68795 .46472
0	.665	-10.215	- .18435	.78555	.05503	.00709	.00024	- .12388 -.23468
0	2.000	- .001	- .32071	.74041	- .00545	.00693	.00150	.78555 .52842
0	.666	1.015	.04611	.65492	- .05099	.00926	.00105	- .12867 .07040
0	3.000	- .008	.05770	.65400	- .01329	.00928	.00088	.65492 -.18381

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K 176+1991 JGB NO.(3509-14)

SAL NO. 199 THETA= 0, CONFIGURATION..(5)

RUN NO. 80

TEST NO. RUN.LG_G ALPHA C CL CX CPM CYM.STAB CRM.STAB (DP/Q)B (L/D)
MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CYM.BODY CRM.BODY CD (X CP/D)

1201	80.668	2.037	.07947	.66534	-.07259	.01088	.00116	-.12787	.11945
2770	2.000	-.008	.10307	.66209	-.01434	.01091	.00077	.66534	-.00429
0	.669	3.058	.10665	.67679	-.08880	.01086	.00136	-.12835	.15758
0	2.000	-.008	.14259	.67014	-.01395	.01092	.00078	.67679	.07723
0	.670	5.099	.15005	.69739	-.10875	.00915	.00174	-.12707	.21516
A-112	0	3.000	-.009	.21143	.68130	-.01374	.00927	.69739	.18564
0	.671	7.138	.18450	.72394	-.12438	.01067	.00229	-.12547	.25486
0	3.000	-.011	.27300	.69541	-.01623	.01087	.00094	.72394	.24440
0	.672	10.178	.18978	.78574	-.12485	.01104	.00302	-.12356	.24152
0	2.000	-.007	.32561	.73985	-.01337	.01140	.00102	.78574	.31655

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NAA SISD SUPersonic AERO LABORATORY TEST DATA PRINTOUT • USE EDPM PROGRAMS 2K176+1991 JOB NO. (3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION• (1)

RUN NO. 81

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM STAB	CRM STAB	(DP/Q)B (L/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM BODY	CRM BODY	CD (X CP/D)

1201	81.673	- .004	.00289	.61837	- .01089	.00899	.00096	- .13027 .00467
2770	3.000	- .010	.00284	.61837	- .01448	.00899	.00096	.61837 -3.12866
	0	.674	-1.030	- .03768	.61631	.01341	.00521	.00090 -.12899 -.06113
	0	3.000	- .005	- .04874	.61554	- .00750	.00519	.00099 .61631 .42479
	0	.675	-2.053	- .07095	.62317	.03268	.00518	.00108 -.12979 -.11385
A-113	0	3.000	- .004	- .09322	.62023	- .00703	.00514	.00126 .62317 .34938
	0	.676	-3.075	- .10164	.62687	.04917	.00539	.00103 -.12995 -.16215
	0	2.000	- .004	- .13512	.62051	- .00688	.00533	.00131 .62687 .33608
	0	.677	-5.120	- .15645	.66865	.07816	.00469	.00104 -.12867 -.23398
	0	2.000	- .002	- .21548	.65202	- .00523	.00458	.00146 .66865 .33729
	0	.678	-10.193	- .18391	.78487	.09051	.00603	.00062 -.12500 -.23432
	0	2.000	- .003	- .31988	.73995	- .00628	.00582	.00168 .78487 .41704
	0	.679	1.022	.04425	.61655	- .03493	.00887	.00111 -.12819 .07178
	0	3.000	- .010	.05524	.61567	- .01385	.00888	.00095 .61655 .06771

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NAA SISD SUPersonic AERO LABORATORY TEST DATA PRINTOUT--(USE EDPM PROGRAMS 2K176+199) JOB NO. (3509-14)

SAL NO. 199 RUN NO. 81
TEST NO. RUN.LOG ALPHA.C CL CX CPM CYM.STAB CRM.STAB IDP/Q1B (L/D)

MACH NO.	RELT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY	CD	(X_CPD)
1201	81.680	2.045	.07846	.62205	-.05482	.00997	.00120	-.12739	.12613
2770	4.000	-.010	.10061	.61885	-.01510	.01001	.00084	.62205	.15517
0	.681	3.068	.10816	.62819	-.07082	.00962	.00125	-.12755	.17217
0	3.000	-.010	.14161	.62150	-.01465	.00967	.00074	.62819	.19991
0	.683	5.112	.16176	.66449	-.09867	.00831	.00164	-.12579	.24343
0	3.000	-.010	.22031	.64743	-.01411	.00842	.00089	.66449	.25213
0	.684	7.151	.19743	.71279	-.11705	.00969	.00211	-.12436	.27698
0	3.000	-.012	.28461	.68268	-.01617	.00988	.00088	.71279	.28875
0	.685	10.189	.19842	.78489	-.11781	.00794	.00250	-.12388	.25280
0	3.000	-.010	.33410	.73742	-.01341	.00826	.00106	.78489	.34739

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT • USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN LOG ALPHA C CL

THEIA= 0, CONFIGURATION.(12)

RUN NO. 82

MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. STAB	CRM. STAB	(DP/Q) B	(L/D)	
						CRM. BODY	CRM. BODY	CD	(X CP/D)	
1201	82.686	- .004	.00258	.66896	-.01036	.00843	.00105	-.13042	.00386	
2770	2.000	- .005	.00253	.66896	-.01033	.00843	.00105	.66896	-3.38889	
0	687	-1.027	-.03003	.66306	.00863	.01065	.00085	-.12978	-.04530	
0	2.000	- .008	-.04191	.66242	-.01361	.01064	.00104	.66306	.49399	
0	688	-2.048	-.05975	.66520	.02711	.00820	.00107	-.12867	-.08983	
A-115	0	2.000	- .005	.08349	.66264	-.00959	.00816	.00136	.66520	.37532
0	689	-3.069	-.08762	.66412	.04435	.00666	.00111	-.12867	-.13194	
0	2.000	- .003	-.12304	.65847	-.00715	.00659	.00146	.66412	.33955	
SID	0	.690	-5.107	-.13316	.68650	.07198	.00803	.00088	-.12835	-.19397
	0	2.000	- .004	.19373	.67192	-.00899	.00792	.00159	.68650	.32845
	0	.691	-9.879	.47098	.64059	-.25873	.00913	.00002	-.12387	.73523
	0	2.000	- .005	.35412	.71188	-.01003	.00899	.00159	.64059	-.03065
	0	.692	1.020	.03753	.66214	-.03089	.00952	.00099	-.12771	.05667
	0	2.000	- .007	.04930	.66136	-.01241	.00954	.00083	.66214	.07349

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NAA SJSD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1199) JOB NO.(3509-14)

SAL NO. 199

THE TA= 0, CONFIGURATION.(12)

RUN NO. 82

TEST NO. RUN LOG ALPHA C CL CX CPM CYM STAB CRM STAB (DP/Q)B (L/D)

MACH NO.	RELT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CD	(X CP/D)
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1201	82.693	2.041	.06641	.66238	-.04855	.00941	.00126	-.12707	.10026
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2770	3.000	-.007	.08995	.65959	-.01195	.00944	.00093	.66238	.16021
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0	.694	3.061	.09242	.66370	-.06402	.00982	.00140	-.12611	.13925
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0	2.000	-.007	.12772	.65782	-.01271	.00988	.00087	.66370	.19876
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0	.695	5.100	.14005	.68565	-.09312	.01059	.00184	-.12387	.20425
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0	2.000	-.008	.20043	.67049	-.01432	.01071	.00090	.68565	.23542
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0	.696	7.133	.16924	.72193	-.11190	.01011	.00215	-.12243	.23442
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0	3.000	-.008	.25755	.69534	-.01391	.01030	.00088	.72193	.26554
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0	.697	10.186	.21738	.75880	-.14078	.00464	.00167	-.12419	.28647
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0	3.000	-.003	.34811	.70841	-.00578	.00486	.00083	.75880	.29560
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NAA SISO SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199 THETA= 0, CONFIGURATION.(15)

RUN NO. 83

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB (DP/Q)B (L/D)	REIT	YAW C	ICN/BODY	(CA)BODY	(CY)BODY	CYM. BODY	CRM. BODY	CD	(X CP/D)
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1201		83.698		-.004	.00624	.70085	-.01123		.01405		.00059	-.29517		.00890		
1575		2.000		-.022	.00619	.70085	-.01842		.01405		.00059	.70085	-.111308			
		0		.699	-.004	.00585	.70324	-.01100		.01368		.00045	-.29595		.00832	
		0		2.000	-.021	.00580	.70324	-.01781		.01368		.00046	.70324	-.1.19577		
		0		.700	-.1.059	-.03555	.72200	.01525		.01321		.00026	-.30064	-.04924		
		A-117		0	2.000	-.018	-.04888	.72122	-.01654		.01320		.00050	.72200	.38809	
		0		.701		-2.106	-.06672	.75758		.03595		.01173		.00038	-.30924	-.08807
		0		2.000		-.015	-.09451	.75462		.01419		.01170		.00081	.75758	.31966
		0		.702		-3.152	-.09096	.80679		.05144		.01204		.00023	-.31706	-.11274
		0		2.000		-.014	-.13517	.80057		.01396		.01201		.00089	.80679	.31947
		0		.703		-5.211	-.06513	1.10413		.04203		.01292		0	-.32175	-.05899
		0		2.000		-.009	-.16512	1.09365		.01263		.01287		.00118	1.10413	.44549
		0		.705		-10.322	-.08349	.89477		.05047		.01014		-.00049	-.08408	-.09331
		0		2.000		-.008	-.24244	.86533		.01028		.01007		.00134	.89477	.49182

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NAA SISD SUPersonic AERO LABORATORY TEST DATA PRINTOUT •• (USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(15)

RUN NO. 83

TEST NO. RUN.LOG ALPHA C CL CX CPM CYM STAB CRM STAB IDP/Q1B LD/D

MACH NO.	RELT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM BODY	CRM BODY	CO	X CP/D
----------	------	-------	-----------	-----------	-----------	----------	----------	----	--------

1201	83.706	1.049	.04502	.72462	-.03632	.01291	.00117	-.29908	.06212
1575	2.000	-.020	.05827	.72368	-.01700	.01293	.00094	.72462	.07667
0	.707	2.096	.07472	.76705	-.05576	.01292	.00152	-.30690	.09741
0	2.000	-.020	.10272	.76380	-.01708	.01296	.00104	.76705	.15714
0	.708	3.141	.09943	.81829	-.07277	.01354	.00174	-.31550	.12151
0	2.000	-.020	.14411	.81161	-.01770	.01362	.00100	.81829	.19505
0	.709	5.201	.08146	1.11273	-.07333	.01536	.00205	-.32175	.07321
0	2.000	-.019	.18198	1.10076	-.01867	.01548	.00065	1.11273	.29705
0	.710	7.247	.07271	1.11705	-.07657	.01362	.00239	-.30846	.06509
0	2.000	-.017	.21301	1.09896	-.01662	.01382	.00065	1.11705	.34052
0	.711	10.310	.06071	1.07882	-.07633	.00984	.00295	-.28266	.05627
0	2.000	-.012	.25278	1.05054	-.01218	.01021	.00115	1.07882	.39803
0	.712	-10.317	-.06711	.95529	.04775	.00981	-.00035	-.14819	-.07025
0	2.000	-.005	-.23709	.92784	-.00899	.00972	.00141	.95529	.49860

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JBB NG.(3509-14))

SAL No. 199 THETA= 0. CONFIGURATION..(15) RUN No. 83

TEST No. RUN. LOG ALPHA C CL CX CPM CYM. STAB CRM. STAB (DP/Q)B (L/D)
MACH No. REI I YAW C (CN)BODY (CA)BODY (CY)BODY CRM.BODY CD (X CP/D)

1201	83.713	-10.164	-.09501	.94011	.20418	.00153	-.00052	-.14428	-.10106
1575	2.000	-.003	-.25938	.90860	-.00861	.01045	.00135	.94011	-.08717

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SID 62-343

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. USE EDPM PROGRAMS 2K176+1991 JOB NO. (3509-1)

SAL NO. 199

TEST NO. RUN LOG

RUN NO. 34

THETA= 0, CONFIGURATION..(16)

TEST NO. RUN LOG ALPHA C CL CX CPM CYM. STAB CRM. STAB (DP/QIB (L/D)

MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CRM. BODY CRM. BODY CD (X CP/D)

1201	84.714	-.005	.00429	.74626	-.01001	.01079	.00068	-.30897	.00575
1575	3.000	-.020	.00422	.74626	-.01531	.01079	.00068	.74626	-1.66852
0	.715	-1.061	-.03690	.75253	.01584	.00927	.00059	-.30584	-.04903
0	2.000	-.014	-.05082	.75172	-.01219	.00925	.00076	.75253	.388832
0	.716	-2.112	-.06907	.77625	.03521	.01028	.00036	-.31445	-.08898
0	2.000	-.017	-.09762	.77318	-.01386	.01026	.00074	.77625	.33933
0	.717	-3.156	-.09213	.80047	.04872	.01198	.00018	-.31758	-.11510
0	2.000	-.017	-.13605	.79419	-.01524	.01195	.00084	.80047	.34188
0	.718	-5.235	-.12407	.85973	.07008	.01061	.00014	-.32384	-.14432
0	2.000	-.013	-.20198	.84483	-.01249	.01055	.00111	.85973	.35302
0	.719	-10.400	-.15913	.84485	.07307	.00855	-.00033	-.15323	-.18835
0	2.000	-.004	-.30900	.80226	-.00452	.00847	.00122	.84485	.46352
0	.720	1.048	.04221	.75749	-.03409	.00941	.00084	-.30662	.05573
0	3.000	-.017	.05605	.75659	-.01346	.00943	.00067	.75749	.09184

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NAA SISD SUPersonic AERO Laboratory TEST DATA PRINTOUT • (USE EDPM PROGRAMS 2K176+1991 JOB NO. (3509-14))

SAL NO. 199

THETA= 0, CONFIGURATION. (16)

RUN NO. 84

TEST NO. RUN LOG

ALPHA C

CL

CPM

CYM. STAB

(DP/QIB (L/D))

MACH NO.

(CN) BODY

(CA) BODY

(CY) BODY

CRM. BODY

CRM. BODY

CD

(X CP/D)

1201 84.721 2.097 .07264 .78215 -.05291 .01065 .00122 -.30584 .09287

1575 2.000 -.018 .10120 .77897 -.01458 .01069 .00083 .78215 .17715

0 .722 3.140 .09572 .81258 -.06812 .01123 .00145 -.31132 .11780

0 2.000 -.017 .14007 .80612 -.01471 .01129 .00083 .81258 .21365

0 .723 5.221 .12802 .86938 -.08830 .01209 .00177 -.32227 .14726

A-121 0 3.000 -.020 .20659 .85413 -.01670 .01220 .00066 .86938 .27258

0 .725 4.180 .11172 .83785 -.07780 .01187 .00163 -.31758 .13334

0 2.000 -.020 .17247 .82748 -.01621 .01196 .00076 .83785 .24892

0 .726 7.297 .14822 .93619 -.10335 .01114 .00205 -.33167 .15832

SID 62-343 0 3.000 -.024 .26591 .90979 -.01759 .01131 .00062 .93619 .31134

0 .727 10.390 .14070 1.00337 -.09723 .01111 .00284 -.32854 .14023

0 3.000 -.022 .31932 .96156 -.01689 .01144 .00079 1.00337 .39550

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JGB NO.(3509-14)

SAL NO. 199 THETA= 0, CONFIGURATION..(6) RUN NO. 85

TEST NO. RUN.LOG ALPHA C CL CX CPY CYM. STAB (DP/Q) B (L/D)

MACH NO. REI I YAW C (CN) BODY (CA) BODY (CY) BODY CYM. BODY CRM. BODY CD (X CP/D)

1201	85.728	- .004	.00621	.82982	.04010	.00572	.00060	-.03247	.00749	
1575	2.000	- .009	.00615	.82982	-.01123	.00572	.00060	.82982	-1.19825	
0	.729	-10.165	-.01838	.75114	.03352	.00532	-.00044	-.00663	-.02446	
0	2.000	- .007	-.15062	.73611	-.00982	.00532	.00051	.75114	.30574	
0	.730	10.151	.00564	.87751	.03999	.00413	.00159	-.18202	.00643	
A-122	0	2.000	- .007	.16018	.86278	-.00849	.00435	.00084	.87751	.17194

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JGB NG.(3509-14)

SAL NO. 199

THETA= 20. CONFIGURATION..(6)

RUN NO. 86

TEST NO. RUN LOG ALPHA C CL CX CPM CYMBODY CRM STAB DP/QIB LD

MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CRM BODY CD (X CP/D)

1201	86.732	20.050	.06793	.75656	.03445	.00656	0	-.05231	.08978
1575	2.000	-.001	.32314	.68744	-.00766	.00616	-.00225	.75656	.22110
0	.733	30.128	-.00756	.95958	.03163	.00784	.00186	-.31486	-.00788
0	2.000	-.001	.47502	.83379	-.00789	.00771	-.00233	.95958	.20303
0	.734	30.128	-.00651	.95584	.03144	.00780	.00192	-.31565	-.00682
0	2.000	-.002	.47405	.83003	-.00771	.00771	-.00226	.95584	.20304
A-123	0								

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. (USE EDPM PROGRAMS 2K176+199) JOB NO. (3509-14)

SAL NO. 199

RUN NO. 87

TEST NO. RUN LOG ALPHA C

THETA= 40, CONFIGURATION. (6)

MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CRM. BODY CD (X CP/D)

1201	87.735	39.960	.01937	.92325	.01736	.00805	.00011	-.30509	.02098
1575	2.000	-0.001	.60771	.69530	-.00953	.00624	-.00509	.92325	.20107
0	.736	50.056	-.04178	.93265	.00513	.00688	.00214	-.33814	-.04480
0	2.000	-.004	.68811	.63094	-.00571	.00606	-.00389	.93265	.19336

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. (USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14))

SAL NO. 199

TEST NO. 60, CONFIGURATION. (6)

RUN NO. 88

TEST NO.	RUN.LG.G	ALPHA C	CL	CX	CPM	CYM.STAB	CRM.STAB	(DP/Q)B (L/D)	MACH NO.	REI I	YAW C (CN)BODY	(CA)BODY	CYM.BODY	CRM.BODY	CD	(X CP/D)
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1201	88.737	59.494	-.11091	.89910	-.00803	.00859	.00110	-.32873	-.12336	0	.739	69.532	-.20514	.85389	-.03060	.00440	.00277	-.35077	-.24024
1575	2.000	-.007	.71823	.55211	-.00534	.00530	-.00684	.89910	.18347	0	3.000	.024	.72814	.49094	.01051	.00413	-.00316	.85389	.15820

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. (USE EDPM PROGRAMS 2K176+199) JGB NO.(3509-14)

SAL NO. 199

THETA= 80, CONFIGURATION..(6)

RUN NO. 89

TEST NO. RUN.LOG ALPHA C CL CX CPM CYM.STAB CRM.STAB (DP/Q)B (L/D)
MACH NO. REFL YAW C (CN)BODY (CA)BODY (CY)BODY CRM.BODY CD (X CP/D)

1201	89.740	79.599	- .29752	.74388	- .01387	.00572	.00111	- .33966	- .39996
1575	2.000	- .002	.67783	.42710	- .00555	.00213	- .00543	.74388	.18237
0	.741	89.878	- .17485	.66570	- .01302	.00402	.00183	- .31919	- .26265
0	0	2.000	- .001	.66527	.17646	- .00414	.00183	- .00401	.66570
									.20479

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JAB NO.(3509-14)

SAL NO. 199

THETA= 80, CONFIGURATION..(6)

RUN NO. 90

TEST NO. RUN.LOG ALPHA C CL CX CPM CRM.STAB (DP/Q)B (L/D)

MACH NO. REFL YAW C (CN)BODY (CA)BODY (CY)BODY CRM.BODY CD (X CP/D)

1201	90.742	79.748	-.21753	.71364	-.02322	.00500	.00258	-.05335	-.30482
3270	2.000	-.001	.66344	.34125	-.00255	.00343	-.00446	.71364	.17466
0	.743	89.784	-.24687	.60664	-.00805	.00402	.00239	-.05993	-.40696
0	2.000	-.001	.60563	.24934	-.00308	.00240	-.00401	.60664	.20242

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPN PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199 THETA=100, CONFIGURATION.=16) RUN NO. 91

TEST NO. RUN.LOG ALPHA C CL CX CPM CYM.STAB CRM.STAB (DP/Q)B (L/D)
MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CRM.BODY CD (X CP/D)

1201	91.744	99.519	-.12881	.51130	-.00991	.00135	.00057	-.05530	-.25193
3270	2.000	-.002	.52555	.04265	-.00655	.00034	-.00142	.51130	.21635
0	.745	109.625	.06082	.48936	.01720	.00272	.00012	-.06067	.12428
0	2.000	-.001	.44059	-.22148	-.00484	-.00080	-.00261	.48936	.30869

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

RUN NO. 92

THETA=120, CONFIGURATION.(6)

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM•STAB	CRM•STAB (DP/Q)B	(L/D)
MACH NO.	RELT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY	CD (X CP/D)
1201	92.746	120.245	.28791	.55821	.02132	.00736	.00014	-.06365 .51577
3270	2.000	.005	.33742	-.52975	.00232	-.00358	-.00643	.55821 .39579

0	.747	125.296	.37436	.62900	.01934	.00913	.00081	-.06561 .59517
0	2.000	.007	.29734	-.66885	.00526	-.00461	-.00792	.62900 .43773
0	.748	130.344	.44353	.71401	.01488	.01084	.00163	-.06682 .62118
0	2.000	.009	.25741	-.80016	.00829	-.00577	-.00932	.71401 .48119

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO. (3509-1))

SAL NO. 199

TEST NO. RUN LOG

RUN NO. 93

THETA=140, CONFIGURATION..(6)

MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM BODY	CRM BODY	CD	(X CP/D)
1201	93.749	140.101	.52078	.92639	-.00142	.01660	.00210	-.06681	.56216
3270	3.000	.013	.19518	-1.04466	.01476	-.01138	-.01226	.92639	.54848

0	.750	135.067	.49467	.81635	.00772	.01503	.00108	-.06803	.60596
0	2.000	.012	.22679	-.92719	.01391	-.00987	-.01139	.81635	.51520
0	.751	130.029	.44677	.71747	.01404	.01301	.00018	-.07047	.62271
0	2.000	.010	.26237	-.80345	.01075	-.00823	-.01009	.71747	.47415
0	.752	143.119	.52579	.99338	-.00814	.01750	.00286	-.06852	.52929
0	2.000	.014	.17613	-1.11006	.01629	-.01227	-.01280	.99338	.56560
0	.753	145.132	.52508	1.03639	-.01264	.01783	.00319	-.06633	.50664
0	2.000	.014	.16224	-1.15043	.01619	-.01280	-.01282	1.03639	.58037
0	.754	147.143	.51980	1.08174	-.01773	.01854	.00398	-.06559	.48052
0	2.000	.015	.15083	-1.19063	.01761	-.01341	-.01341	1.08174	.58810
0	.755	149.153	.51042	1.12618	-.02257	.01913	.00465	-.06486	.45323
0	2.000	.016	.13983	-1.22851	.01856	-.01403	-.01381	1.12618	.59688

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K 176+199) JOB NO.(3509-14)

SAL NO. 199

RUN NO. 93

THETA=140, CONFIGURATION..(6)

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB (DP/Q)B	(L/D)	
MACH NO.	RELT	YAW C	(CN)BGDY	(CA)BGDY	(CY)BGDY	CYM.BGY	CRM.BGY	CD	(X CP/D)
1201	93.756	151.163	.49873	1.16900	-.02784	.01948	.00550	-.06559	.42663
3270	2.000	.016	.12757	-1.26453	.01953	-.01440	-.01422	1.16900	.60653

1201	93.756	151.163	.49873	1.16900	-.02784	.01948	.00550	-.06559	.42663
3270	2.000	.016	.12757	-1.26453	.01953	-.01440	-.01422	1.16900	.60653

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDDM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

RUN NO. 94

THETA=160, CONFIGURATION..(6)

TEST NO. RUN.LOG ALPHA C CL CX CPM CYM STAB (DP/Q)B (L/D)

MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CRM BODY CRM BODY CD (X CP/D)

1201	94.757	159.825	.41901	1.35252	-.05522	.02601	.00220	-.06241	.30980
3270	2.000	.021	.07391	-1.41401	.02618	-.02365	-.01105	1.35252	.62141
0	.758	154.812	.48442	1.26152	-.04135	.02341	.00009	-.07412	.38400
0	3.000	.018	.09921	-1.34768	.02200	-.02114	-.01006	1.26152	.62453
0	.759	150.800	.51992	1.18001	-.03020	.02236	-.00121	-.07485	.44061
0	4.000	.017	.12247	-1.28364	.02181	-.00986	1.18001	.61171	
0	.760	169.844	.22103	1.48624	-.06391	.09371	.04656	-.06315	.14872
0	2.000	.141	.04534	-1.50190	.30127	-.08400	-.06241	1.48624	.78438

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN.LOG

RUN NG. 95

THETA=180, CONFIGURATION..(6)

MACH NO.	RELT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CY.M. STAB	CRM. STAB	(DP/Q)B (L/D)	CD	(X CP/D)
1201	95.761	180.000	.01677	1.51898	-.10810	.00491	.00193	-.06167	.01104	
3270	2.000	-0.001	-0.01586	-1.51899	-0.00583	-0.00491	-0.00193	1.51898	1.40589	
0	0	762	190.002	-0.21377	1.48584	-.12887	.00444	.00276	-.06679	-.14387
0	2.000	0	0	-0.04662	-1.50041	-.00648	-.00485	-.00195	1.48584	1.10574

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO. (3509-14)

SAL NO. 199

THETA= 60, CONFIGURATION..(6)

RUN NO. 96

TEST NO. RUN.LG_G ALPHA C CL CX CPM CYM.STAB CRM.STAB (DP/Q)B (L/D) MACH NO. REI_I YAW C (CN)BODY (CA)BODY (CY)BODY CRM.BODY CRM.CP/D)

1201	96.763	59.613	-.12952	.89439	-.04731	.00743	.00224	.53943	-.14482
3270	2.000	-.003	.70589	.56429	-.00158	.00569	-.00527	.89439	.12582
0	•764	69.641	-.23657	.82395	-.01204	.00693	.00316	-.06800	-.28711
0	2.000	-.003	.69007	.50860	-.00230	.00537	-.00540	.82395	.17907

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SAL NO. 199

THETA= 40, CONFIGURATION..(6)

RUN NO. 97

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CD	(X CP/D)

1201	97.765	50.014	- .04719	.93114	- .00004	.00729	.00166	- .07237	- .05068
3270	2.000	-0	.68301	.63462	- .00760	.00595	- .00452	.93114	.18513
	0	.766	39.999	.06484	.93015	.00753	.00732	.00075	- .06675
	0	2.000	- .001	.64746	.67095	- .00606	.00609	- .00413	.93015
									.19050

NAA SISD SUPersonic AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

RUN NO. 98

THETA= 20, CONFIGURATION..(6)

TEST NO. RUN.LOG ALPHA C CL CX CPM CYM.STAB CRM.STAB (DP/Q)B (L/D)

MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CRM.BODY CD (X CP/D)

1201	98.767	20.039	.17035	.86948	.01293	.00781	.00058	-.06723	.19592
3270	2.000	-0	.45792	.75850	-.00758	.00754	-.00213	.86948	.17054
0	.768	30.078	.13299	.91028	.01034	.00770	.00118	-.06747	.14610
0	2.000	-.001	.57122	.72111	-.00951	.00725	-.00284	.91028	.18363

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SID 62-343

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

THEIA= 0, CONFIGURATION..(6)

RUN NO. 99

TEST NO.	RUN.LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB (DP/QIB (L/D))	CYM.BODY	CRM.BODY	CD	(X CP/D)
MACH NO.	REII	YAW C	(CN)BODY	(CA)BODY	(CY)BODY						

1201	99.769	10.072	.10645	.80796	.02317	.00526	.00145	-.06600	.00796	.00051	.00051
3270	2.000	-.004	.24608	.77690	-.01285	.00544	.00051	.00051	.00051	.00051	.00051
	0	.770	-.003	.00341	.78164	.03531	.00456	.00118	-.06551	.00436	
	0	2.000	-.001	.00337	.78164	-.00707	.00456	.00118	.78164	-.06600	.00436
	0	.771	-10.078	-.10044	.80665	.04645	.00423	.00094	-.06600	-.12451	
	0	2.000	-.001	-.24002	.77664	-.00271	.00400	.00167	.00665	.00051	.00051

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SID 62-343

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. (USE EDPM PROGRAMS 2K176+199) JOB NO. (3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION..(17)

RUN NO. 100

TEST NO. RUN.LOG ALPHA C CL CX CPM CRM STAB (DP/Q)B (L/D)
MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CRM.BODY CRM.BODY CD (X CP/D)

1201	100.772	-0.011	0.00061	.86625	-0.00998	.01579	.00071	-.29708	.00071	
1575	2.000	-0.028	0.00044	.86625	-0.02231	.01579	.00071	.86625	-21.88703	
	0	.773	-1.056	-.02724	.86669	.01019	.01469	.00050	-.29471	-.03143
	0	3.000	-0.029	-.04320	.86604	-.02184	.01468	.00077	.86669	.46406
	0	.774	-2.095	-.04798	.87498	.02585	.01736	.00020	-.29708	-.05484
	0	2.000	-0.025	-.07992	.87264	-.02205	.01734	.00083	.87498	.37660
	0	.775	-3.128	-.06332	.88595	.03930	.01711	.00003	-.30023	-.07147
	0	2.000	-0.021	-.11156	.88118	-.02053	.01709	.00097	.88595	.34771
	0	.776	-5.191	-.08578	.91413	.06095	.01467	-.00036	-.30180	-.09384
	0	2.000	-0.016	-.16812	.90262	-.01679	.01465	.00096	.91413	.33745
	0	.777	-10.322	-.12403	.80209	.07926	.01186	-.00104	-.12304	-.15463
	0	2.000	-0.003	-.26571	.76689	-.00953	.01186	.00110	.80209	.40171
	0	.778	-10.319	-.12232	.79735	.07795	.01190	-.00102	-.12383	-.15341
	0	2.000	-0.003	-.26315	.76255	-.00982	.01189	.00112	.79735	.40378

SID 62-343

NAA SISD SUPersonic AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JGB NO.(3509-14)

SAL NO. 199

THETA= 0, CONFIGURATION.(171) RUN NO. 100

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB (DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CRM. BODY	CD	(X CP/D)

1201	100.779	1.033	.02771	.86955	-.02915	.01648	.00110	-.29314	.03186	
1575	3.000	-.030	.04338	.86891	-.02349	.01649	.00080	.86955	.02796	
0	.780	2.072	.04967	.87774	-.04712	.01746	.00145	-.28684	.05659	
0	2.000	-.026	.08137	.87537	-.02273	.01750	.00082	.87774	.12088	
0	.781	3.106	.06528	.88907	-.06069	.01707	.00178	-.28920	.07342	
A-139	0	2.000	-.024	.11335	.88423	-.02178	.01714	.00085	.88907	.16453
0	.782	5.170	.08682	.91441	-.07998	.01580	.00217	-.29156	.09495	
0	2.000	-.022	.16886	.90287	-.02005	.01594	.00074	.91441	.22633	
SID 62-343	0	.783	7.231	.10108	.94854	-.09661	.01398	-.0248	-.29786	.10657
0	2.000	-.021	.21964	.92828	-.01841	.01418	.00070	.94854	.26014	
0	.784	10.313	.10454	.98298	-.10575	.01298	.00322	-.30023	.10635	
0	2.000	-.016	.27880	.94839	-.01589	.01335	.00084	.98298	.32071	

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. (USE EDPM PROGRAMS 2K176+199) JOB NO. (3509-14)
 SAL NO. 199 TEST NO. RUN LOG ALPHA C CL CX CPM CYM STAB CRM STAB DP/Q1B LL/D
 MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CRM BODY CD X CP/D
 THE TA= 0, CONFIGURATION. (18)
 RUN NO. 101 RUN NO. 199
 1201 101.785 -.011 .00231 .89023 -.01193 .01589 .00102 -.29907 .00259
 1575 3.000 -.030 .00214 .89023 -.02329 .01589 .00102 .89023 -4.88673
 0 .786 -1.058 -.02789 .89355 .00992 .01555 .00072 -.30065 -.03121
 2.000 -.026 -.04437 .89288 -.02125 .01553 .00101 .89355 .47653
 0 .787 -2.094 -.04739 .90078 .02626 .01444 .00047 -.30301 -.05261
 0 2.000 -.018 -.08027 .89845 -.01731 .01441 .00099 .90078 .37284
 0 .788 -3.126 -.06163 .91224 .04036 .01431 .00026 -.30380 -.06756
 2.000 -.018 -.11128 .90752 -.01746 .01428 .00104 .91224 .33734
 0 .789 -5.188 -.07992 .93575 .05847 .01396 -.00013 -.30380 -.08541
 0 2.000 -.016 -.16418 .92469 -.01619 .01392 .00113 .93575 .34386
 0 .790 -10.315 -.11464 .81819 .07646 .01012 -.00057 -.12954 -.14011
 0 2.000 -.007 -.25926 .78445 -.00985 .01005 .00125 .81819 .40510
 0 .791 1.031 .02619 .89055 -.02967 .01612 .00125 -.29592 .02940
 0 3.000 -.029 .04220 .88994 -.02288 .01614 .00096 .89055 -.00309

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199

TEST NO. RUN LOG

RUN NO.101

THETA= 0, CONFIGURATION..(18)

MACH NO.	RELT	YAW C	(CN)BODY	(CA)BODY	CX	CPM	CYM	STAB	CRM.	STAB	(DP/Q)B	(L/D)	CD	(X CP/D)
1201	101.792	2.071	.04741	.89865	-.04587	.01498	.00133	-.28724						.05276
1575	2.000	-.022	.07984	.89635	-.01934	.01502	.00079	.89865						.12547
0	.793	3.105	.06259	.90847	-.05952	.01413	.00153	-.28882						.06890
0	2.000	-.019	.11169	.90375	-.01757	.01419	.00076	.90847						.16707
0	.794	5.167	.08433	.93632	-.08152	.01569	.00229	-.29592						.09007
A-141	0	2.000	-.021	.16831	.92492	-.01946	.01583	.00087	.93632					.21562
0	.795	7.225	.09513	.96854	-.09626	.01484	.00238	-.29986						.09823
0	2.000	-.019	.21617	.94889	-.01832	.01502	.00050	.96854						.25469
0	.796	10.307	.09603	.99644	-.10268	.01228	.00298	-.30143						.09637
0	2.000	-.016	.27273	.96319	-.01526	.01261	.00073	.99644						.32350

SID 62-343

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JCB NO. (3509-14)

SAL NO. 199

RUN NO. 102
THETA= 0, CONFIGURATION.. (19)

TEST NO. RUN LOG ALPHA C CL CX CPM CYM STAB CRM STAB (DP/Q)B (L/D)
MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CYM BODY CRM BODY CD (X CP/D)

1201	102.798	-.013	-.00100	.88740	-.00902	.01834	.00096	-.28642	-.00113
1575	2.000	-.027	-.00120	.88740	-.02379	.01834	.00096	.88740	8.23159
0	.799	-1.046	-.01633	.89351	.00417	.01757	.00060	-.29116	-.01828
0	2.000	-.027	-.03264	.89306	-.02324	.01755	.00092	.89351	.57234
0	.800	-2.079	-.03215	.90047	.01849	.01770	.00012	-.29431	-.03570
0	2.000	-.026	-.06479	.89871	-.02278	.01768	.00076	.90047	.41463
0	.801	-3.113	-.04832	.90831	.03342	.01748	-.00027	-.29589	-.05320
0	2.000	-.023	-.09757	.90435	-.02168	.01747	.00068	.90831	.35750
0	.802	-5.171	-.07152	.93460	.06086	.01469	-.00068	-.29668	-.07653
0	2.000	-.016	-.15545	.92435	-.01683	.01469	.00064	.93460	.30850
0	.803	-10.289	-.11047	.79530	.08707	.00945	-.00069	.11845	-.13891
0	2.000	-.013	-.25072	.76279	-.01198	.00942	.00101	.79530	.35271
0	.804	1.022	.01533	.89624	-.02293	.01696	.00165	-.28958	.01710
0	3.000	-.030	.03130	.89582	-.02409	.01699	-.00134	.89624	-.03234

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT.. USE EDPM PROGRAMS 2K176+1991 JOB NO. (3509-14)

SAL NO. 199

TEST NO. RUN LOG ALPHA C CL CX CPM CYM. STAB CRM. STAB (DP/Q)B (L/D)

MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CRM. BODY CD (X CP/D)

1201 102.805 2.059 .03463 .90313 -.03859 .01672 .00189 -.29037 .03834

1575 2.000 -.027 .06705 .90130 -.02242 .01678 .00129 .90313 .12457

0 .806 3.095 .05185 .90994 -.05351 .01699 .00178 -.29116 .05698

0 2.000 -.026 .10089 .90582 -.02227 .01706 .00086 .90994 .16959

0 .807 5.154 .07522 .93701 -.08068 .01711 .00229 -.29037 .08027

A-143 0 2.000 -.025 .15907 .92646 -.02222 .01724 .00075 .93701 .19279

0 .808 7.207 .08727 .95777 -.09933 .01535 .00257 -.29431 .09112

0 2.000 -.022 .20671 .93926 -.01969 .01555 .00063 .95777 .21945

0 .809 10.249 .05684 .96481 -.09171 .01243 .00286 -.29431 .05892

SID 62-343 0 2.000 -.018 .22756 .93931 -.01621 .01274 .00060 .96481 .29699

0 .810 -.012 -.00020 .88790 -.00959 .01835 .00129 -.28642 -.00023

0 2.000 -.028 -.00039 .88790 -.02410 .C1835 .00129 .88790 25.21900

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO. (3509-14)

SAL NO. 199

TEST NO. RUN LOG THETA= 0, CONFIGURATION..(21)

RUN NO. 103

TEST NO. RUN LOG ALPHA C CL CX CPM CYN. STAB CRM. STAB (DP/Q)B (L/D)

MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CYN. BODY CRM. BODY CD (X CP/D)

1201	103.811	-0.006	.00399	.70883	-.00994	.00908	.00101	-.27873	.00562
1575	3.000	-.018	.00392	.70883	-.01370	.00908	.00101	.70883	-1.83767
0	.812	-1.058	-.03134	.71705	.01029	.00980	.00084	-.28345	-.04371
0	3.000	-.019	-.04457	.71635	-.01432	.00979	.00102	.71705	.46911
0	.813	-2.104	-.06165	.73584	.02882	.00985	.00067	-.28976	-.08378
0	2.000	-.016	-.08862	.73308	-.01336	.00982	.00103	.73584	.37479
0	.814	-3.148	-.08687	.75966	.04428	.C1097	.00021	-.29370	-.11436
0	2.000	-.016	-.12846	.75374	-.01422	.C1094	.00081	.75966	.35528
0	.815	-5.227	-.12273	.81396	.06776	.00989	.00010	-.30316	-.15078
0	2.000	-.012	-.19636	.79940	-.01173	.00984	.00100	.81396	.35489
0	.816	-10.395	-.15603	.82046	.06440	.00477	.00038	-.17391	-.19017
0	2.000	-.003	-.30148	.77885	-.00437	.C0462	.00123	.82046	.48639
0	.817	1.046	.03990	.71866	-.03130	.01006	.00121	-.27557	.05552
0	3.000	-.020	.05301	.71781	-.01503	.01008	.00103	.71866	.10946

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SID 62-343

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NAA SISD SUPERSONIC AERG LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JGB NG.(3509-14))

SAL NG. 199 THETA= 0, CONFIGURATION.(21) RUN NO. 103

TEST NO. RUN.LOGG ALPHA C CL CX CPM CYM.STAB CRM.STAB (DP/Q)B (L/D)
MACH NO. REIT YAW C (CN)BODY (CY)BODY (CA)BODY CRM.BODY CD (X CP/D)

1201	103.818	2.094	.07159	.73908	-.05067	.01060	.00122	-.27873	.09686
1575	3.000	-.020	.09854	.73597	-.01545	.01064	.00083	.73908	.18578
0	.819	3.139	.09721	.76445	-.06677	.01062	.00139	-.28424	.12717
0	3.000	-.021	.13892	.75798	-.01579	.01068	.00081	.76445	.21933
0	.820	5.219	.13276	.82128	-.08919	.01029	.00168	-.29134	.16165
0	3.000	-.020	.20690	.80581	-.01528	.01040	.00074	.82128	.26893
0	.821	7.294	.15229	.88103	-.10045	.01079	.00203	-.30079	.17285
0	3.000	-.022	.26288	.85458	-.01653	.01096	.00065	.88103	.31788
0	.822	10.388	.14291	.95884	-.08862	.00966	.00274	-.29922	.14905
0	3.000	-.023	.31343	.91737	-.01607	.00999	.00095	.95884	.41726

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NAA SISD SUPersonic AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199

RUN NO. 104
THETA= 0, CONFIGURATION..(20)TEST NO. RUN.LOG ALPHA C CL CX CPM CYM STAB CRM STAB (DP/Q1B (L/D))
MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CYM.BODY CRM.BODY CD (X CP/D)

1201	104.823	-.002	.00583	.072861	-.00912	.00980	.00106	-.28507	.00800	
1575	3.000	-.017	.00581	.072861	-.01365	.00980	.00106	.72861	-.87000	
0	.824	-1.055	-.03126	.073677	.01237	.00810	.00081	-.28349	-.04242	
0	3.000	-.015	-.04482	.073607	-.01146	.00808	.00096	.73677	.42400	
0	.825	-2.106	-.06264	.075613	.02968	.00900	.00060	-.28586	-.08284	
A-146	0	3.000	-.017	-.09038	.075332	-.01295	.00897	.00093	.75613	.37158
0	.826	-3.153	-.08829	.078197	.04371	.01121	.00031	-.29137	-.11290	
0	2.000	-.017	-.13116	.077593	-.01483	-.01117	.00093	.78197	.36672	
0	.827	-5.235	-.12378	.083879	.06553	.01021	.00032	-.30004	-.14757	
0	2.000	-.012	-.19978	.082400	-.01205	.01014	.00125	.83879	.37198	
0	.828	-10.406	-.16298	.085118	.07196	.00590	.00033	-.17396	-.19148	
0	2.000	-.001	-.31402	.080776	-.00383	.00574	.00139	.85118	.47086	
0	.829	1.046	.03993	.074759	-.03175	.00891	.00111	-.28428	.053422	
0	3.000	-.015	.05357	.074674	-.01215	.00893	.00094	.74759	.107414	

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 JOB NO.(3509-14)

SAL NO. 199 THETA= 0, CONFIGURATION.(20) RUN NO. 104

TEST NO. RUN.LOG ALPHA C CL CX CPM CYM.STAB CRM.STAB (DP/Q)B (L/D)

MACH NO. REIT YAW C (CN)BODY (CA)BODY (CY)BODY CYM.BODY CRM.BODY CD IX CP/DI

1201	104.830	2.098	.07499	.76722	-.05330	.00968	.00122	-.28113	.09774	
1575	3.000	-.016	.10303	.76396	-.01323	.C0971	.00086	.76722	.18263	
0	.831	3.142	.09739	.79152	-.06626	.01028	.00137	-.28428	.12304	
0	3.000	-.017	.14062	.78500	-.01404	.01034	.00081	.79152	.22882	
0	.832	5.223	.13062	.84539	-.08629	.01254	.00193	-.28901	.15451	
A-117	0	3.000	-.025	.20702	.83000	-.01886	.01266	.00078	.84539	.28318
0	.833	7.304	.15744	.90807	-.10343	.01044	.00204	-.29610	.17338	
0	3.000	-.025	.27159	.88069	-.01740	.01061	.00069	.90807	.31915	
62-343	0	.834	10.400	.15283	.98185	-.09715	.01042	.00284	-.29453	.15565
62-343	0	3.000	-.021	.32753	.93814	-.01586	.01076	.00092	.98185	.40337

0	.833	7.304	.15744	.90807	-.10343	.01044	.00204	-.29610	.17338
0	3.000	-.025	.27159	.88069	-.01740	.01061	.00069	.90807	.31915
0	.834	10.400	.15283	.98185	-.09715	.01042	.00284	-.29453	.15565

0	.833	7.304	.15744	.90807	-.10343	.01044	.00204	-.29610	.17338
0	3.000	-.025	.27159	.88069	-.01740	.01061	.00069	.90807	.31915
0	.834	10.400	.15283	.98185	-.09715	.01042	.00284	-.29453	.15565

0	.833	7.304	.15744	.90807	-.10343	.01044	.00204	-.29610	.17338
0	3.000	-.025	.27159	.88069	-.01740	.01061	.00069	.90807	.31915
0	.834	10.400	.15283	.98185	-.09715	.01042	.00284	-.29453	.15565

NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. (USE EDPM PROGRAMS 2K176+199) JOB NO. (3509-14)

RUN NO. 105
SAL NO. 199
THETA = 0, CONFIGURATION. (6)

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q) B	(L/D)
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CYM. BODY	CRM. BODY	CD	(X CP/D)

1201	105.835	-.004	.00525	.86253	.04035	.00497	.00077	-.13829	.00609
2490	2.000	-.001	.00519	.86253	-.00577	.00497	.00077	.86253	-.178969
0	.836	-10.138	-.07133	.87318	.05015	.00455	.00091	-.13596	-.08169
0	2.000	.005	-.22388	.84700	.00019	.00432	.00170	.87318	.23917

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NAA SISD SUPPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K 176+1991 JOB NO.(3509-14)

SAL NO. 199

RUN NO. 106

THETA=180, CONFIGURATION..(6)

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM STAB	CRM STAB (DP/Q)B (L/D)	(X CP/D)	
MACH NO.	REIT	YAW C	(CN) BODY	(CA) BODY	(CY) BODY	CRM BODY	CD	(X CP/D)	
1201	106.839	190.005	-.21000	1.45439	-.12449	.00513	.00258	-.14303	-.14439
2490	2.000	-.002	-.04496	-1.46878	-.00440	-.00550	-.00166	1.45439	1.08191
0	.840	180.003	.01924	1.48378	-.10427	.00542	.00151	-.13669	.01297
0	2.000	-.002	-.01843	-1.48379	-.00425	-.00542	-.00151	1.48378	1.14853

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO. (3509-14)

SAL NO. 199

TEST NO. RUN LOG THETA= 20, CONFIGURATION..(6) RUN NO.107

TEST NO. RUN LOG ALPHA C CL CX CPM CYM STAB CRM STAB IDP/QJB (L/D)
MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CYM BODY CRM BODY CD (X CP/D)

1201	107.841	20.054	.12854	.90741	.02404	.00799	.00014	-.12763	.14165
2490	2.000	-.002	.43184	.80835	-.00685	.00756	-.00260	.90741	.18525
0	.842	30.129	.09346	.92967	.01712	.00792	.00091	-.13852	.10054
0	2.000	-0	.54741	.75721	-.00825	.00731	-.00319	.92967	.18968

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT. (USE EDPM PROGRAMS 2K176+199) JGB NO. (3509-14)

SAL NO. 199

THETA=160, CONFIGURATION..(6)

RUN NO.108

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B (L/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY	CD (X CP/D)

1201	108.844	169.984	.22166	1.46034	-.08148	.02615	.00622	-.13176 .15178
2490	2.000	.040	.03653	-1.47662	.02709	-.02467	-.01068	1.46034 .39390
0	.846	159.963	.41696	1.33603	-.05547	.02564	.00210	-.12735 .31208
	2.000	.038	.06679	-1.39799	.02649	-.02336	-.01077	1.33603 .64421
0	.847	154.955	.50914	1.26999	-.04557	.02432	.00030	-.14148 .40090
A-151	0	3.000	.036	.07706	-1.36607	.02469	-.02190	-.01058 1.26999 .69437
0	.848	150.920	.52989	1.19675	-.03256	.02406	-.00105	-.15353 .44277
	3.000	.036	.11920	-1.30338	.02493	-.02154	-.01079	1.19675 .61187

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199 THETA= 40, CONFIGURATION..(6) RUN NO. 109

TEST NO. RUN.LOG ALPHA C CL CX CPM CYM.STAB CRM.STAB (DP/Q)B (L/D)

MACH NO. REIT YAW C (GN)BODY (CA)BODY (CY)BODY CRM.BODY CD (X CP/D)

1201	109.849	39.986	.04 178	.93818	.01205	.00733	.00041	-.15248	.04453
2490	2.000	-.004	.63480	.69208	-.00452	.00588	-.00439	.93818	.19467
0	.850	50.022	-.05683	.93737	.00262	.00731	.00168	-.16311	-.06063
0	2.000	-.002	.68168	.64592	-.00599	.00599	-.00452	.93737	.18795

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 J08 NO.(3509-14)

SAL No. 199

THEIA=140, CONFIGURATION..(6)

RUN NO. 110

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB	(DP/Q)B	(L/D)
MACH NO.	RELT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM.BODY	CRM.BODY	CD	(X CP/D)

1201	110.851	140.287	.53199	.95545	-.00402	.C1744	.00187	-.15223	.55680
2490	2.000	.026	.20173	-1.07480	.01679	-.01222	-.01259	.95545	.53435
0	.852	135.221	.50627	.84994	.00538	.0163C	.00114	-.14950	.59566
	3.000	.025	.23974	-.95981	.01635	-.C1076	-.01229	.84994	.49861
	0	.853	130.145	.45634	.75778	.01217	.01444	.00017	-.15184
A-153	0	2.000	.022	.28540	-.83727	.01441	-.00918	-.01115	.75778
	0	.854	143.324	.53728	1.01984	-.00993	.01877	.00300	-.14432
	2.000	.029	.17875	-1.13877	.01933	-.C1325	-.01363	1.01984	.56027
	0	.855	145.348	.53646	1.05813	-.01398	.C1947	.00351	-.13357
SID	0	2.000	.031	.16091	-1.17539	.02011	-.01401	-.01397	1.05813
	62-343	0	.856	147.369	.53199	1.08086	-.01740	.C2042	.00439
	0	2.000	.033	.13540	-1.19705	.02213	-.01482	-.01471	1.08086
	0	.857	149.388	.51859	1.14526	-.02323	.C2C84	.00525	-.13149
	0	2.000	.034	.13749	-1.24966	.02305	-.01526	-.01514	1.14526
	0								.607

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NAA SI SD SUPersonic AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+199) JOB NO.(3509-14)

SAL NO. 199 RUN NO. 110

TEST NO. RUN.LOG ALPHA C CL CX CPM CYM. STAB (DP/QIB (L/D)

MACH NO. REIT YAW C (CN) BODY (CA) BODY (CY) BODY CYM.BODY CRM.BODY CD (X CP/D)

	1201	110.858	151.406	.50520	1.18802	-.02848	.01887	.00549	-.13551	.42525
	2490	2.000	.032	.12564	-1.28485	.02308	-.01393	-.01386	1.18802	.61658

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NAA SISD SUPERSONIC AERO LABORATORY TEST DATA PRINTOUT..(USE EDPM PROGRAMS 2K176+1991 J08 NO.(3509-14))

SAL NG. 199

THETA= 60, CONFIGURATION•(6)

RUN NO.111

TEST NO.	RUN LOG	ALPHA C	CL	CX	CPM	CYM. STAB	CRM. STAB (DP/Q)B	(L/D)
MACH NO.	REIT	YAW C	(CN)BODY	(CA)BODY	(CY)BODY	CYM. BODY	CRM. BODY	CD (X CP/D)

1201	111.859	59.526	-.12466	.89341	-.06453	.00740	.00210	-.14924	-.13954
2490	2.000	.008	.70666	.56068	.00033	.00557	-.00531	.89341	.10189
0	.860	69.722	-.26158	.82451	.19364	.00859	.00335	-.13343	-.31726
0	3.000	-.009	.68263	.53128	-.00065	.00612	-.00690	.82451	.47776

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NORTH AMERICAN AVIATION, INC.



SPACE and INFORMATION SYSTEMS DIVISION

PLOTTED DATA

(Upon request, plotted data will be added when available.)

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